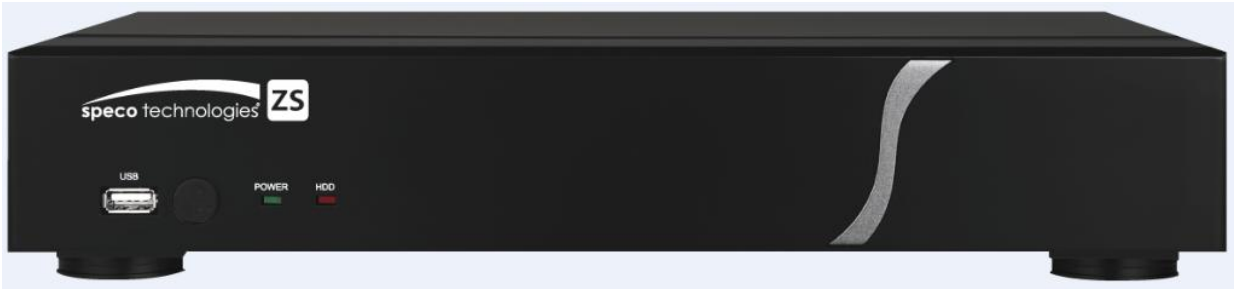
User Guide (Ver. 1.4)

Models: ZIPKIT

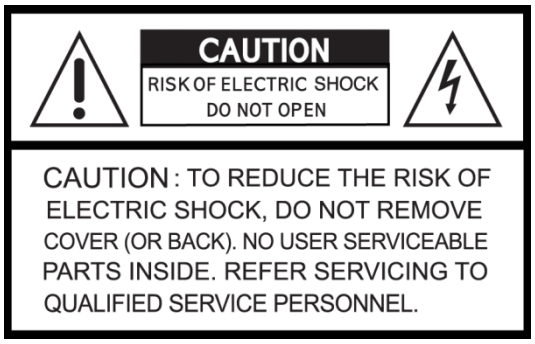
Network Video Recorder and IP Camera



About This User's Guide

Before operating the unit, please read this user's guide thoroughly and retain it for future reference.

Cautions


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Explanation of Graphical Symbols

This symbol indicates the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

This symbol indicates the presence of “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock, property damage, personal injury, or death.

WARNING

To reduce a risk of fire or electric shock, do not expose this product to rain or moisture.

CAUTION

Changes or modifications not approved by the manufacture will void the warranty of the product.
Using an incompatible battery may increase the risk of fire or explosion.
Replace only with the same or equivalent type battery recommended by the manufacture.
Discard used batteries according to manufacturer’s instructions.

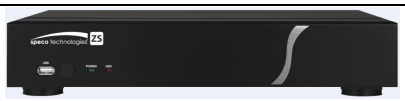
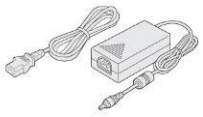
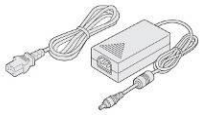
These precautions must be followed for safety reasons

Warning

- Do not use if the unit emits smoke.
- Do not disassemble the unit.
- Do not place any heavy or sharp objects on the unit.
- Do not place on uneven surface.
- Do not expose to shock or vibration.
- Do not move the unit when the unit is powered on.
- Do not block, and allow dust to accumulate in the air vents.
- Do not restrict airflow of the unit; doing so can damage the unit.
- Only qualified and experienced personnel should perform installation and servicing.
- Turn off the power of the ZS when connecting Cameras, Audio or Sensor Cables.
- The manufacturer is not responsible for any damage caused by improper use of the product or failure to follow instructions for the product.
- The manufacturer is not responsible for any problems caused by or resulting from the user physically opening the ZS for examination or attempting to repair the unit.
- For ZS models with the PoE Switch, it is strongly recommended that the 48V connector is inserted to the PoE Switch before the AC cable is attached to the adaptor.

Product Components

Please make sure the following components are included as specified below.

Desktop: NxZS	
Bundle IP Camera(PoE) 4 EA	
Remote Control	
Battery 1.5V (AAA x 2 EA)	
Quick Setup Guide & User Guide	
Mouse for NxZS	
Software & Manual CD	
Power Adaptor (DC12V 5A for NxZS) & Power cable (110V or 220V)	
Power Adaptor (DC48V 1A for POE of N4ZS DC48V 2A for POE of N8ZS) & Power cable (110V or 220V)	

Specifications

MODEL			N4ZS	N8ZS
Video	Input	IP Cameras	4	8
		Max Bit Rate	20Mbps	20Mbps
		Resolution	Max. 1920x1080	
	Output	Main Monitor	VGA and HDMI	
		Sub Monitor	CVBS (BNC)	
Audio	Input	IP Cam Audio	4	8
		RCA Input	4	4
	Output	RCA Output	1	
	Audio Codec		G.711	
Event	Sensor In	IP Cam Sensor	4	8
		Local Input	4 (Terminal Block)	
	Local Alarm Output (Terminal Block)		1	
	IP Camera Motion Detection		Yes	
Serial	RS-232C		Yes	
	RS-485		Yes	
Network	Private (IP Camera, Auto Connection)		4 Port PoE	8 Port PoE
	LAN (Remote Access, IP Camera)		10/100 Base-T	10/100 Base-T
	Protocols		TCP/IP, UDP, DHCP, HTTP, NTP, SMTP, RTP, RTSP	
Recording	Compression		H.264 (Baseline, Main, High Profile)	
	Resolution & Frame Rate	D1	120fps	240fps
		1280x720	120fps	240fps
		1920x1080	120fps	240fps
	Recording Mode		Continuous / Motion / Sensor / Schedule / Manual	
	Pre Recording		Max. 20 Minutes	
	Post Recording		Max. 60 Seconds	
Playback	Search		EZ Search, Date/Time, Event, Archive, Log	
	Multi-Decoding		1, 4	1, 4, 8
	Playback Speed		x0.25, x0.5, x2, x4, x8, x16, x32, x64	
Backup	Media		USB drive, External HDD, Network(via USB)	
	File Format		BMP, AVI, Proprietary Format	
	Large Backup		Yes (Max. 24 hours)	
Storage	HDD	1 HDD Max Size	3TB	
		Internal HDDs	1	
	USB	Front	1	
		Rear	1	
User I/F	Input Method		IR, Mouse, Keyboard Controller	

Features	Dynamic DNS	Yes (Free Speco DDNS)	
	Digital Zoom	Yes	
	DLS (Day Light Savings)	Yes	
	NTP (Network Time Protocol)	Yes	
	S.M.A.R.T.	Yes	
	Internal Beep	Yes	
	Multi-Language	Yes	
	e-mail Notification	Yes	
Network Access	3G Mobile	iPad / iPhone / Android	
	Web Viewer	Windows (IE, Chrome, Firefox, Safari)	
	PC Client	Multi Client	
	Remote Setup and Upgrade	Yes	
Power	Power Supply Voltage	DC12V 5A & DC48V 1A	DC12V 5A & DC48V 2A
Temperature	Operating Temperature	41°F ~ 104°F (5°C ~ 40°C)	
	Storage Temperature	14°F ~ 122°F (-10°C ~ 50°C)	
Weight	Desktop Unit Weight (Gross weight)	Approximately 12 lbs	
Dimension	Unit Dimension (W x D x H)	13.5”W x 10.3”D x 2.5”H	

Please note that specifications and unit exterior design are subject to change without notification.

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1. Main Features

- Automatic IP Camera Detection and connection (Plug & Play)
- Easy Record, Copy and Setup
- Easy Search by Thumbnail Preview
- Easy Copy
- Easy Network
- Easy IP Camera Setup

NOTE: Under federal law, The Fourth Amendment to the U.S. Constitution, Title III of the Omnibus Crime Control and Safe Streets Act of 1968, as amended by the Electronic Communications Privacy Act of 1986 (18 U.S.C. § 2510, *et seq.*), and the Foreign Intelligence Surveillance Act of 1978 (50 U.S.C. 1801, *et seq.*) permit government agents, acting with the consent of a party to a communication, to engage in warrantless interceptions of telephone communications, as well as oral and electronic communications.

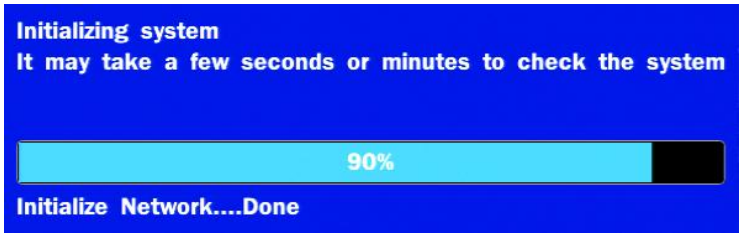
- Covert camera operation provides enhanced security and administrator control
- Dynamically programmable recording priority, motion detection, alarms and scheduling
- Simple and Easy Graphic User Interface
- Simple Scheduler
- HDMI Output
- VGA Output
- Password to secure installation authorization
- Network software supports 10/100Mbps
- USB 2.0 port for video clip exporting and easy firmware upgrade via USB Flash Drive

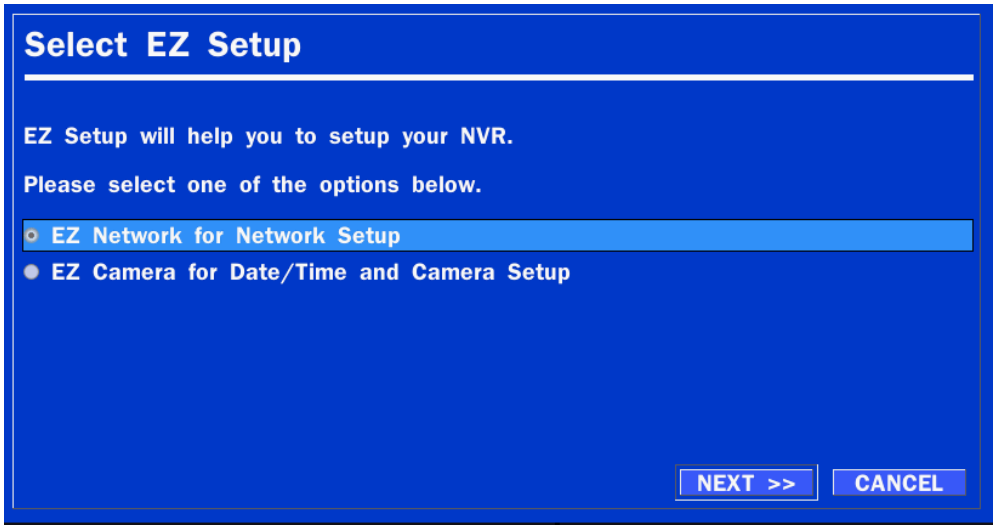
2. Initial Boot-up Process

2-1. Initial Boot up and Basic Time Setup

1. During the first boot up, the following logo will be displayed.

2. After the logo, select the language and set date and time as specified below.



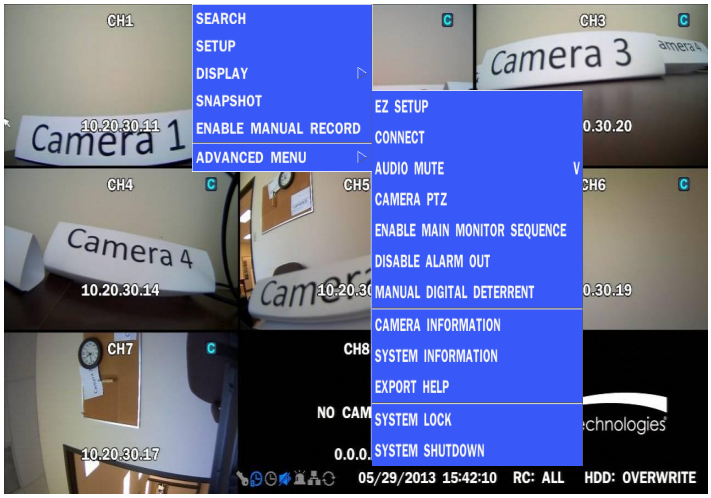

Select EZ Setup
EZ Setup will help you to setup your NVR.
Please select one of the options below.
EZ Network for Network Setup
EZ Camera for Date/Time and Camera Setup
NEXT >>
CANCEL

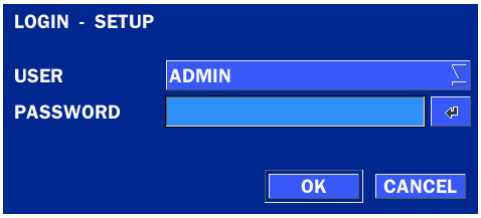
(EZ Setup Page Reference / **Page.16~18**)

2-2. Setting up Daylight Savings Time

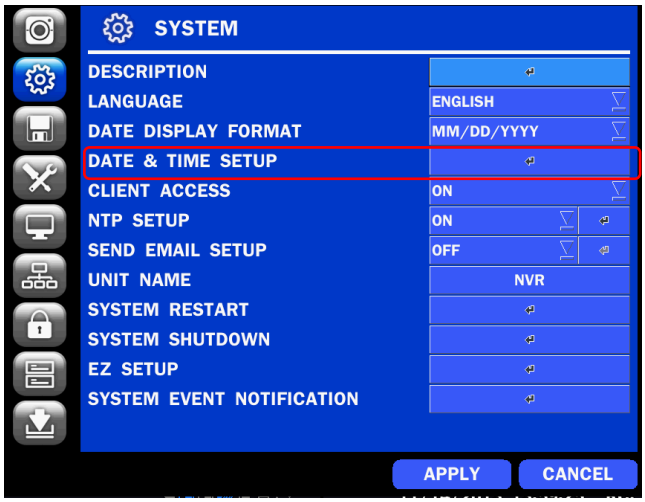
To enable Daylight Saving feature/NTP synchronization, take the following steps.

1. Enter the SETUP mode. The default Username is “ADMIN” and Password is “1111”.





2. Go to SETUP > SYSTEM > DATE & TIME SETUP



3. Select ON from the DAYLIGHT SAVING dropdown menu.

2-3. Setting NTP (Network Time Protocol)

1. SETUP > SYSTEM > NTP SETUP > ON

2. Select the proper TIME ZONE time.

Table2.3.1. GMT Time Zone

	State	Standard Time	Daylight-Saving Time
AL	Alabama	GMT-6	GMT-5
AK	Alaska	GMT-9	GMT-8
AK	Alaska (Aleutian Islands)	GMT-10	NA
AZ	Arizona	GMT-7	NA
AZ	Arizona (Navajo)	GMT-7	GMT-6
AR	Arkansas	GMT-6	GMT-5
CA	California	GMT-8	GMT-7
CO	Colorado	GMT-7	GMT-6
CT	Connecticut	GMT-5	GMT-4
DC	District of Columbia	GMT-5	GMT-4
DE	Delaware	GMT-5	GMT-4
FL	Florida	GMT-5	GMT-4
FL	Florida (W)	GMT-6	GMT-5
GA	Georgia	GMT-5	GMT-4
HI	Hawaii	GMT-10	NA
ID	Idaho (N)	GMT-8	GMT-7
ID	Idaho (S)	GMT-7	GMT-6

IL	Illinois	GMT-6	GMT-5
IN	Indiana	GMT-5	GMT-4
IN	Indiana (SW / NW)	GMT-6	GMT-5
IA	Iowa	GMT-6	GMT-5
KS	Kansas	GMT-6	GMT-5
KS	Kansas (W)	GMT-7	GMT-6
KY	Kentucky (E)	GMT-5	GMT-4
KY	Kentucky (W)	GMT-6	GMT-5
LA	Louisiana	GMT-6	GMT-5
ME	Maine	GMT-5	GMT-4
MD	Maryland	GMT-5	GMT-4
MA	Massachusetts	GMT-5	GMT-4
MI	Michigan	GMT-5	GMT-4
MI	Michigan (W)	GMT-6	GMT-5
MN	Minnesota	GMT-6	GMT-5
MS	Mississippi	GMT-6	GMT-5
MO	Missouri	GMT-6	GMT-5
MT	Montana	GMT-7	GMT-6
NE	Nebraska	GMT-6	GMT-5
NE	Nebraska (W)	GMT-7	GMT-6
NV	Nevada	GMT-8	GMT-7
NH	New Hampshire	GMT-5	GMT-4
NJ	New Jersey	GMT-5	GMT-4
NM	New Mexico	GMT-7	GMT-6
NY	New York	GMT-5	GMT-4
NC	North Carolina	GMT-5	GMT-4
ND	North Dakota	GMT-6	GMT-5
ND	North Dakota (W)	GMT-7	GMT-6
OH	Ohio	GMT-5	GMT-4
OK	Oklahoma	GMT-6	GMT-5
OR	Oregon	GMT-8	GMT-7
OR	Oregon (E)	GMT-7	GMT-6
PA	Pennsylvania	GMT-5	GMT-4
RI	Rhode Island	GMT-5	GMT-4
SC	South Carolina	GMT-5	GMT-4
SD	South Dakota (E)	GMT-6	GMT-5
SD	South Dakota (W)	GMT-7	GMT-6
TN	Tennessee (E)	GMT-5	GMT-4
TN	Tennessee (W)	GMT-6	GMT-5
TX	Texas	GMT-6	GMT-5

TX	Texas (W)	GMT-7	GMT-6
UT	Utah	GMT-7	GMT-6
VT	Vermont	GMT-5	GMT-4
VA	Virginia	GMT-5	GMT-4
WA	Washington	GMT-8	GMT-7
WV	West Virginia	GMT-5	GMT-4
WI	Wisconsin	GMT-6	GMT-5
WY	Wyoming	GMT-7	GMT-6

NOTE: If you want the unit to automatically synchronize the local time, the Time Zone must be properly set according to your local time zone.

2-4. EZ SETUP

Quick Menu for ZS and IP Camera Easy installation(Right-Click on the Main Screen)

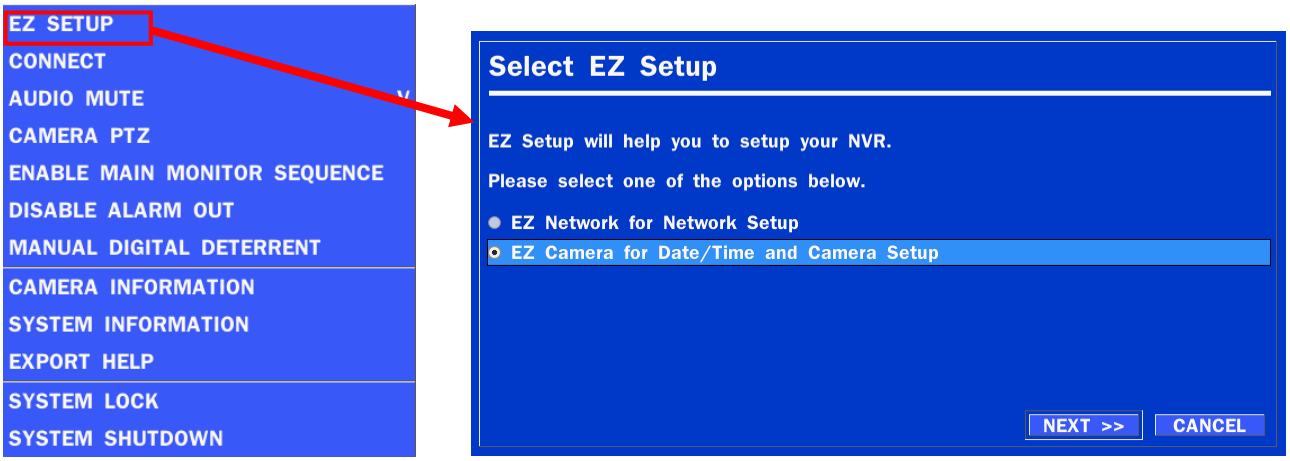


Figure 2.4. EZ Setup Screen

2.4.1. Setup DATE & TIME, IP CAMERA configurations.

Figure 2.4.1. EZ CAMERA Setup Procedure

① Select EZ Camera for Date/Time and Camera Setup, Click NEXT to proceed.

② Description of EZ Camera Setup is displayed, Click NEXT to proceed.

③ Set up the Date/Time settings and click NEXT to get to the camera setup.

④ Configure individual cameras in the EZ Camera Setup.

- Select the Channel to configure.
- Select the Camera Manufacturer and then click on the scan button; this will scan the networks for any cameras from the particular manufacturer.
- Select the desired Camera from the list, and then click on register.
- If necessary, click on Preview to Preview the camera, or Setup to change camera settings.

2.4.2. EZ NETWORK (Using an internet connection)

Figure 2.4.2. EZ NETWORK Setup Procedure

① Select YES in case of setting the network using an internet connection.

② Select Auto Configuration(DHCP) or Manual Configuration(STATIC) and then click TEST Button. It will automatically setup the network for the system.

③ Setup DDNS setting. DDNS(Dynamic Domain Name System) allows a DNS name to be constantly synchronized with a dynamic IP address. It allows using a dynamic IP address to be associated with a static domain name. Refer to the full version manual for more information.

④ Click Finish to save the setup.

2.4.3. EZ NETWORK setting (Not using internet connection)

Figure 2.4.3. EZ NETWORK Setup – Manual Configuration Screen

① Select NO if the ZS is not using an internet connection.

② Select Auto Configuration(DHCP) or Manual Configuration(STATIC) and then click TEST button when ready.

③ Input the Network Settings if Manual Configuration(STATIC) was selected, and click TEST

④ Select OFF for ENABLE DDNS and click NEXT button.

⑤ Click Finish to save the setup.

2-5. PoE Port SETUP

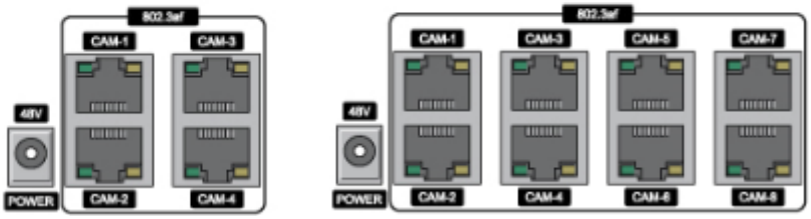


Figure 2.5. PoE Port (N4ZS/N8ZS)

2.5.1 Connecting the Camera

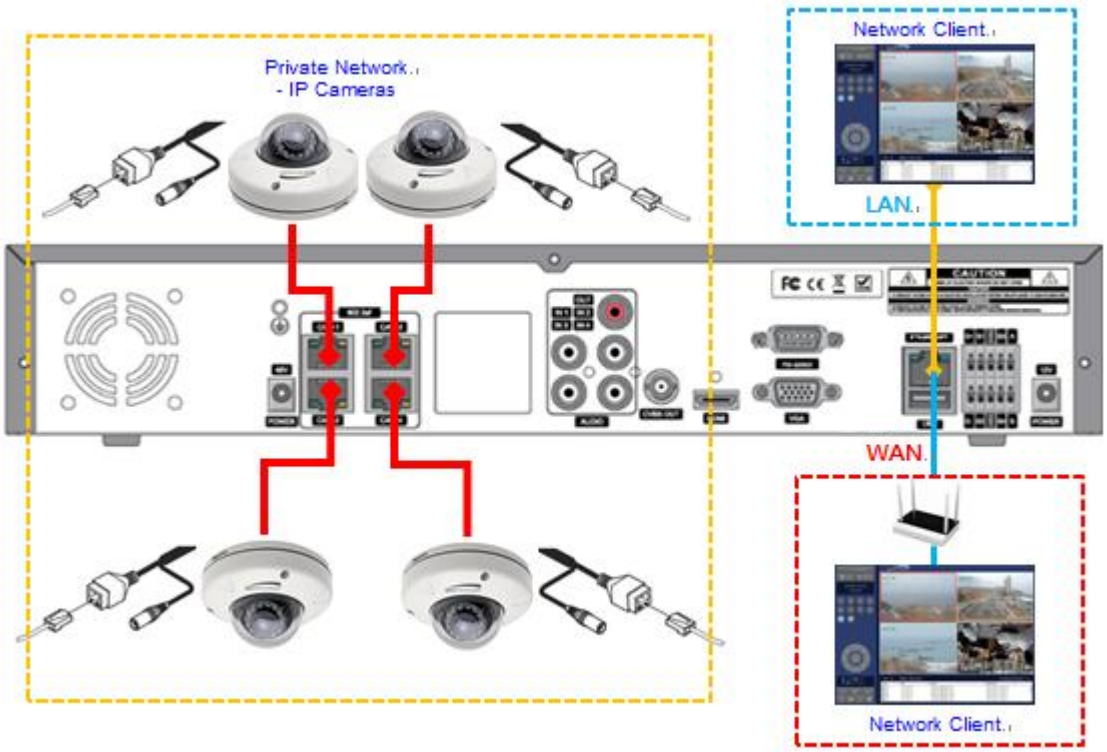


Figure 2.5.1. IP Camera Connection Diagram (N4ZS)

Table 2.5.1. Factory Default of the IP Camera

The following IP Camera settings are recommended for optimal connection with the ZS Series

Setup Items	Default	Description
Network Type	DHCP	The IP Camera must act as a DHCP client for the "Plug and Play".
Encoding Type	CBR	The "CBR" is recommended because of the internal buffer strategy of the ZS.
Dual Streaming	General	Sub Stream must be turned on. The compression type of both Main and Sub stream must be **H.264**.
	Main	1920x1080@30fps, **5Mbps** (Max. throughput of the N4ZS/ N8ZS is **20Mbps**)
	Sub	D1@30fps, 1Mbps
Audio	G.711	Only **G.711** is supported

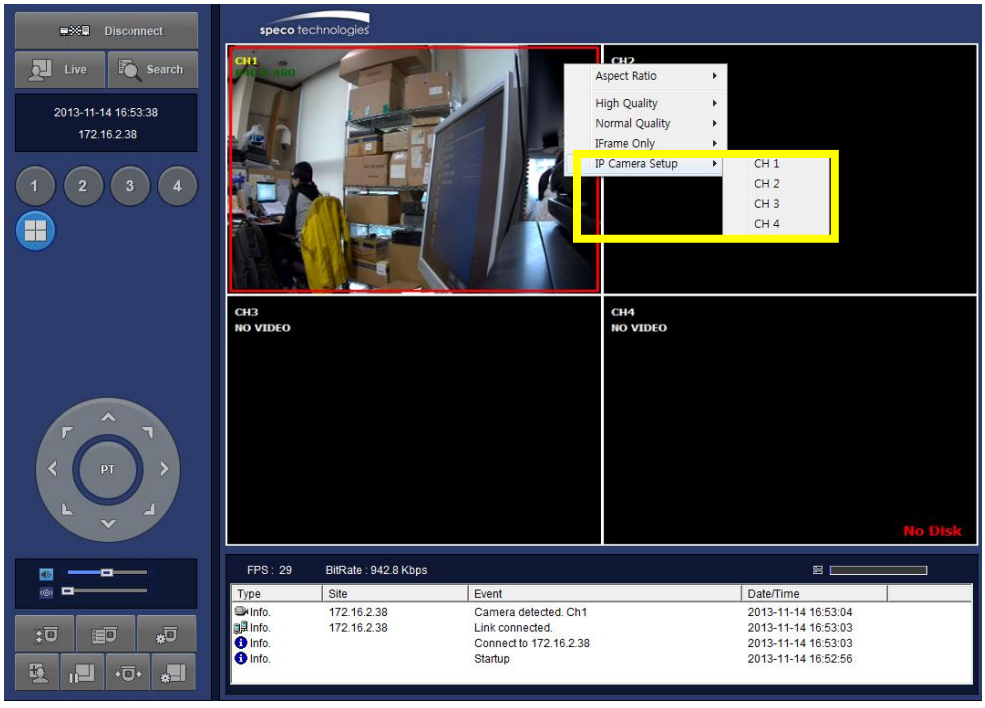
- The ZS Series features a "Plug and Play" function with a PoE Switch.
- The “Plug and Play” functionality requires the IP Camera to be in DHCP mode.
- The ZS automatically assigns an IP Address to the IP Camera. (192.168.78.11 ~ 254)
- The ZS models will automatically map the camera on the PoE Port to the corresponding ZS channel number.

Figure 2.5.2. Incorrect connection with the PoE Ports

With the ZS Models, it is prohibited to connect a router to the POE Ports to connect the IP Camera, the ZS will not be able to find and connect to the camera. The LAN Port can be connected to a router, but not the PoE Ports.

2-6. IP Camera SETUP (through SpecoTech Web Viewer)

ZS Series allows remote access to the IP Cameras through "IP Camera Setup" menu in SpecoTech Web Viewer.



① Click the mouse right button

② Select “IP Camera Setup”.

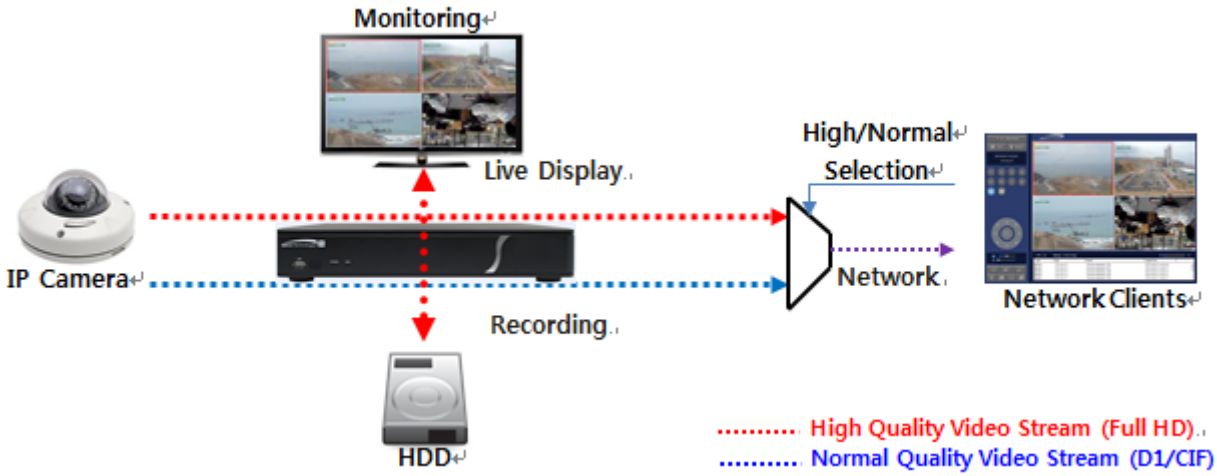
③ Select Channel Number.

④ It launches the camera’s web setup page.

In order for the web pages to launch from the “IP Camera Setup” menu when accessed from the WAN, Ports 59011 to 59254 on the router must be port forwarded to the ZS. The local address of the ZS can be found in the system information.

2-7. Dual Streaming

- High Quality (Main Profile) Video Stream is used for both Recording and Live Display.
- High Quality (Main Profile) Video Stream can be viewed through the network, when selected.
- Normal (Secondary) Quality Video Stream is used by default when viewing through the network.



3. Front and Rear Panels

3-1. Desktop Front Panel

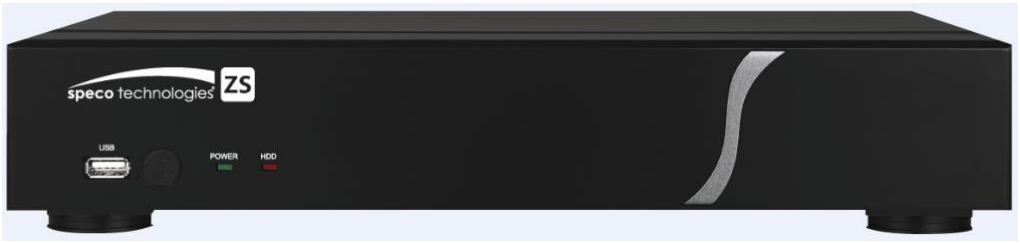


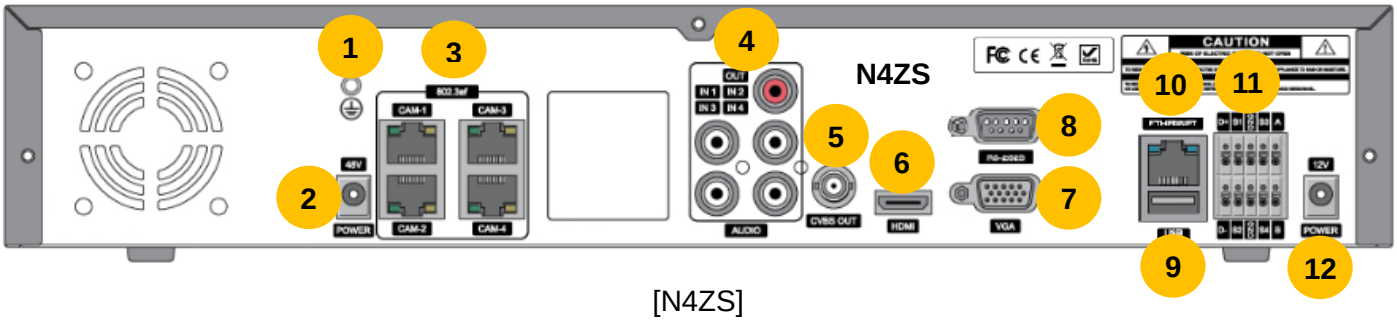
Figure 3.1.1. Desktop ZS Front panel

Table 3.1.1. Front LED and Port of ZS

Name	Description
POWER	LED light is on when power is applied to the system.
HDD	LED light is on when the system is recording video data.
USB Port	This USB port is for archiving footage into a USB device. (USB 2.0)

3-2. Connectors

- Do not power this system on before all the connections are completed.
- Make sure all the connections are properly secured. Faulty connection may result in the system being damaged.



[N4ZS]

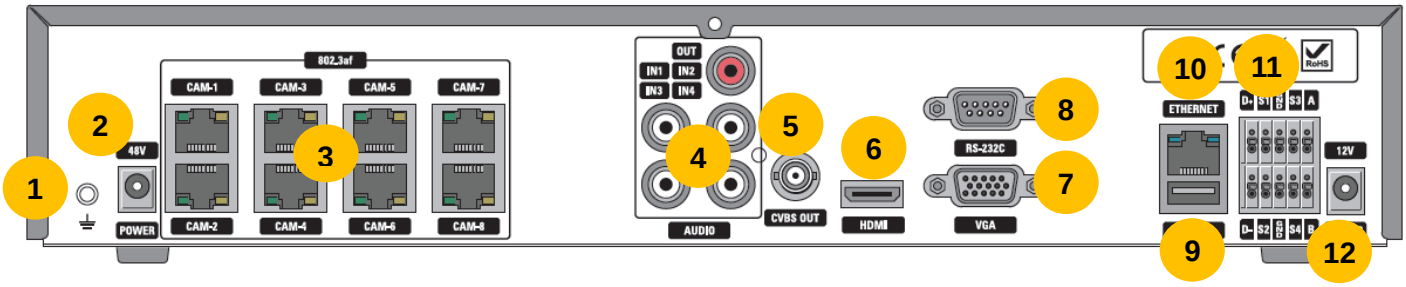


Figure 3.2.1. Connectors

① Ground: Use for grounding.

② PoE POWER: DC48V, 1A (N4ZS), DC48V, 2A (N8ZS)

③ PoE PORTS: N4ZS (4 Port PoE), N8ZS (8 Port PoE)

④ AUDIO IN/OUT: 4 Connectors for Audio Input / 1 Connector for Audio Output

⑤ CVBS OUT: MAIN – Composite Video Output.

⑥ HDMI OUT: HDMI output port, Connector to the HDMI Monitor, (1280x720, and 1920x1080).

⑦ VGA OUT: Connector for VGA Monitor, Main Video Output.

⑧ RS232C: Console Interface

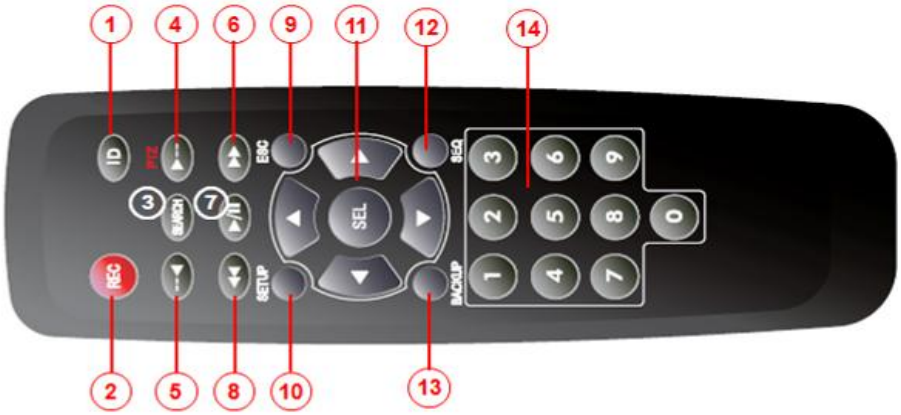
⑨ USB PORT: Connector for USB Mouse or USB flash memory.

⑩ ETHERNET PORT1: RJ-45 Connector for LAN Connection, used for Internet Connection

⑪ SENSOR IN, ALARM OUT, RS-485: 4 sensor inputs, 1 alarm output and RS-485 for PTZ

⑫ POWER: DC12V input

3-3. Remote Control



① ID: Used to set up the remote control ID.

② REC: To enable or disable manual recording mode.

③ SEARCH: Goes to SEARCH menu for playback options.

④ F/ADV:

- During Playback – Moves the playback forward by 60 seconds.
- During Pause – Moves the playback forward by 1 frame.

⑤ F/REW:

- During playback – Moves the playback backward by 60 seconds.
- During Pause – Moves the playback backwards by 1 frame.

⑥ FF: Increases playback speed (fast fowards).

⑦ PLAY/PAUSE: To play or to pause the recording in playback mode

⑧ REW: Plays video backwards (rewinds), additional selection increases backwards playback speed.

⑨ ESC:

- During Setup – Returns to the previous menu screen.
- During Playback – Exits playback mode.
- System lock – Locks the system when pressing ESC button for 5 seconds.
- System unlock – Unlocks the system when pressing ESC button for 5 seconds.
- During Live – Brings up the Quick Menu.

⑩ SETUP: Opens up the SETUP menu.

⑪ Direction buttons: Used to move menu items or select a channel.

⑫ SEQ: Starts auto sequence the screen when in full screen mode. (Toggle)

⑬ BACKUP: Start the backup operations in live or playback mode.

⑭ 0~9: Used to select channel (1,2,3,..) or to setup a ZS Remote ID.

4. Setting up the ZS

The following sections detail the initial setup of the ZS.

Menu screen will close if user input is not received within 5 minutes.

4-0. Setup – Main Live Screen

To enter the setup menu, right click on the mouse and select setup from the Quick Menu or press the setup button on the remote control.

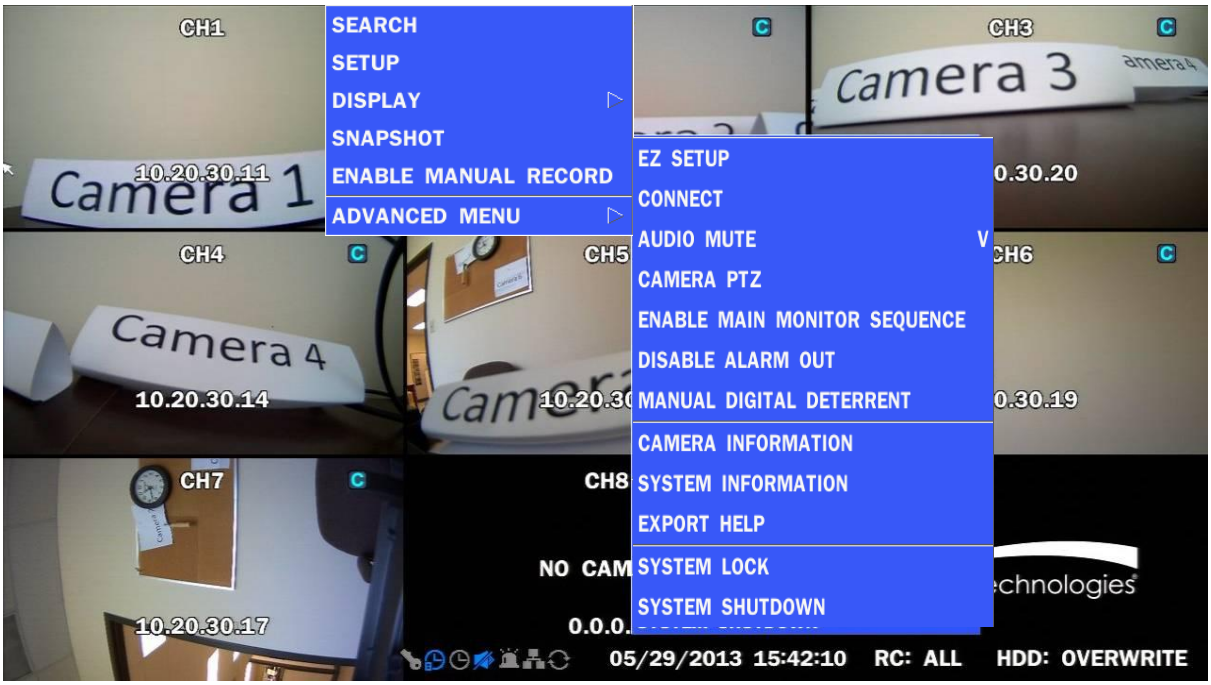
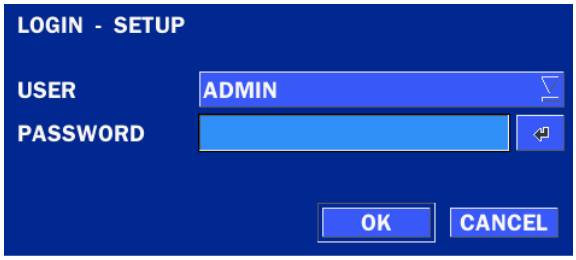


Table 4.0.1. Live Screen and Quick Menu



When the ZS prompts the LOG-IN window, enter the PASSWORD using the virtual keyboard, or the front panel, or the remote control. For ADMIN, the factory default password is 1111. It is highly recommended to assign a new password to protect the system. User can assign a new password in SECURITY setup menu.

4-1. Setup – IP CAMERA

Press the SETUP button and enter the password. The IP Camera setup menu is displayed below.

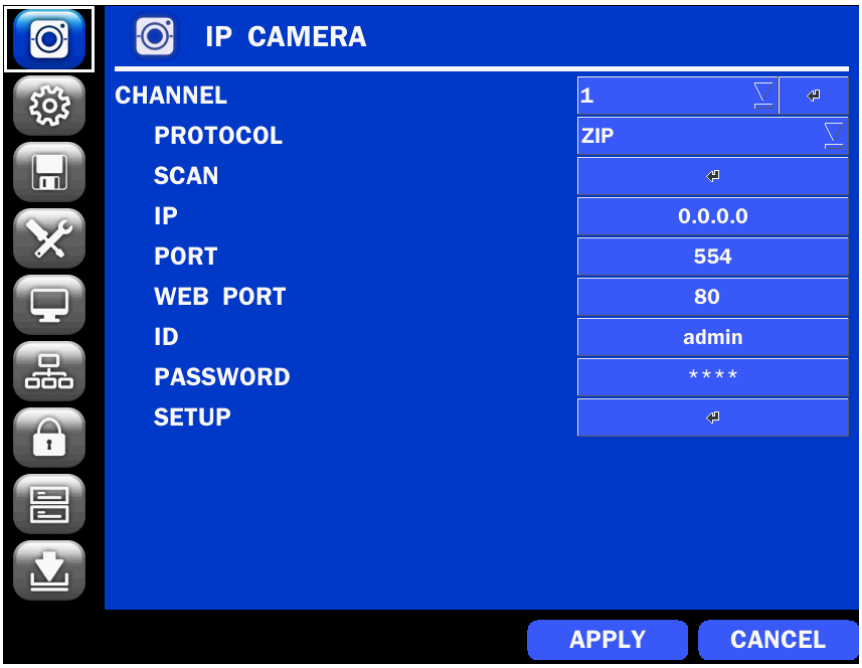
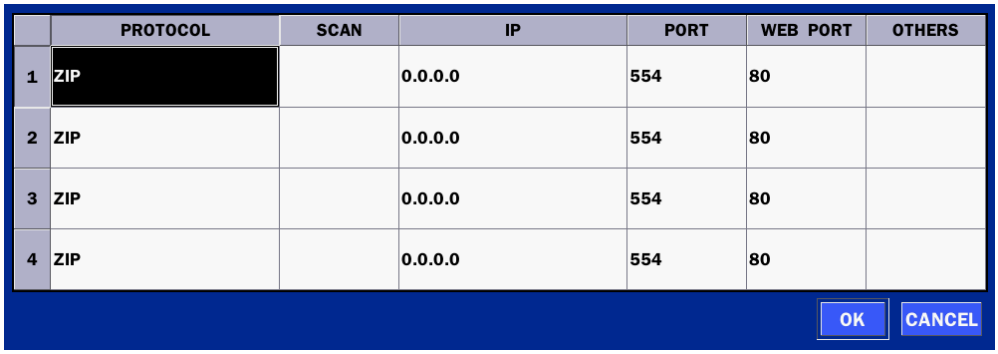


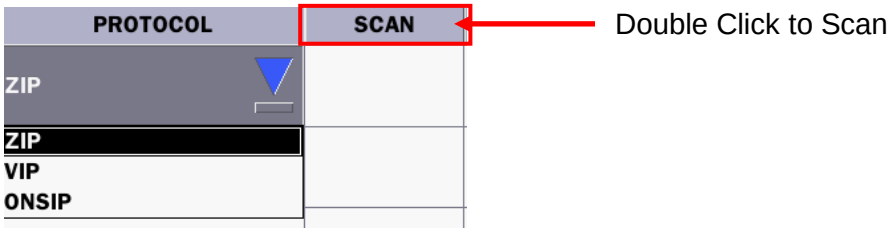
Figure 4.1.1. IP Camera mode setup screen

Table 4.1.1. Menu items in IP CAMERA mode setup

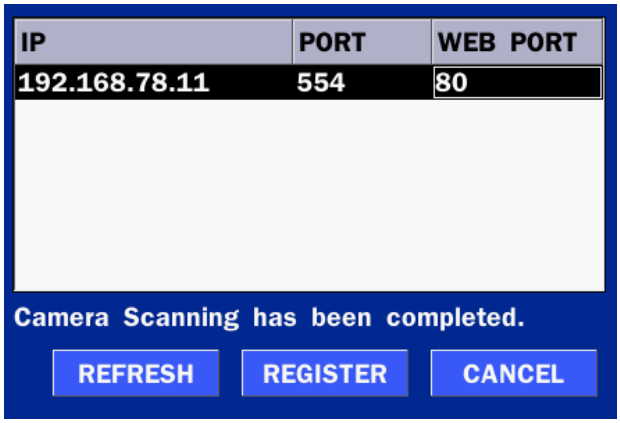
Item	Description
CHANNEL	To manually connect each camera, click on the to get this window:



Under the column labeled Type, Select IP Camera Manufacturer.



SCAN: Double click the empty box to search IP camera on the local network.

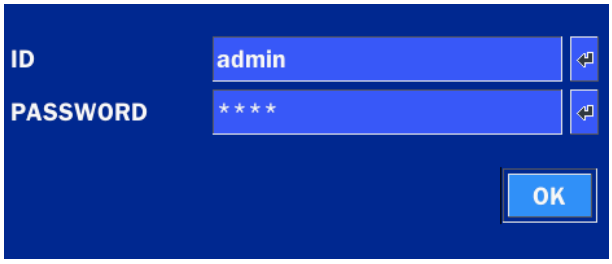


IP: Enter the address of IP camera to connect, or select from scanned list.

PORT: Enter the port number of IP camera to connect

WEB PORT: Enter the web port number of IP camera to connect

OTHERS: Change the IP camera setting. Double click the empty box and then Log-In box will be pop-up. (Enter ID and PASSWORD of IP Camera)



PROTOCOL	Select the Brand of the Camera.
SCAN	Automatic IP Camera Search the network. for IP Camera
IP	Enter the IP Address of the desired Camera.
PORT	Enter the Camera stream Port Number (default: 554)
WEB PORT	Enter the Camera Web Port Number (default: 80)
ID	Enter the User ID for access to the IP Camera
PASSWORD	Enter the PASSWORD for the associated ID
SETUP	IP Camera Video Setup(Resolution, Frame rate, and Bitrate)

4-1-1. SCAN Menu

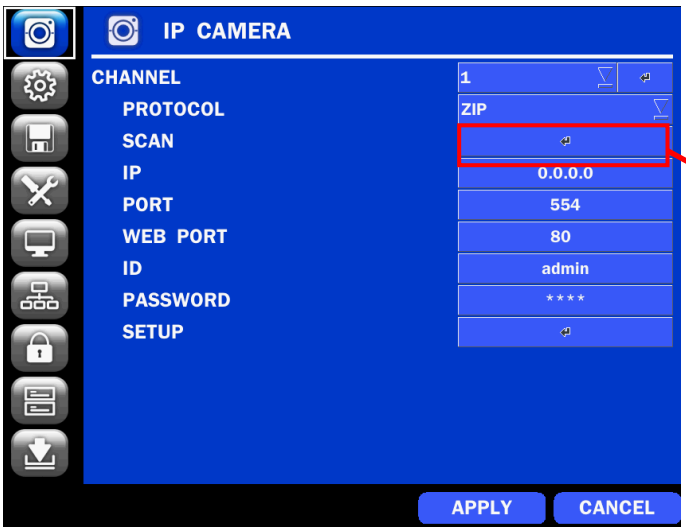


Figure 4.1.2 IP CAMERA Setup Screen

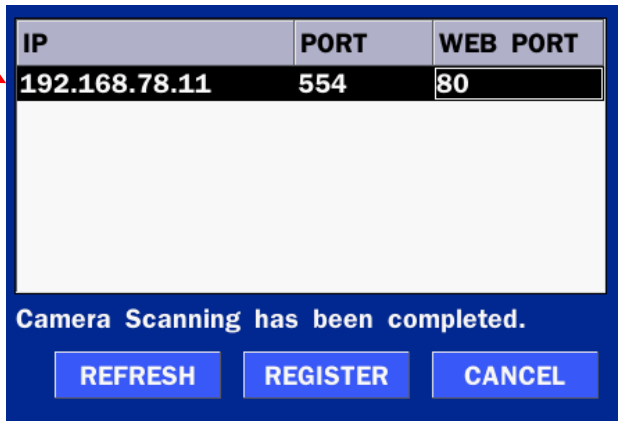


Figure 4.1.3 Search IP Camera Screen

① Select the specific manufacturer of IP Camera and then on click the scan button

② Select the camera on the list and then click the register button.

③ After the registration is completed, the basic information is to be displayed.

4-2. Setup – SYSTEM

In the SETUP menu, select the SYSTEM tab. Then, the SYSTEM menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

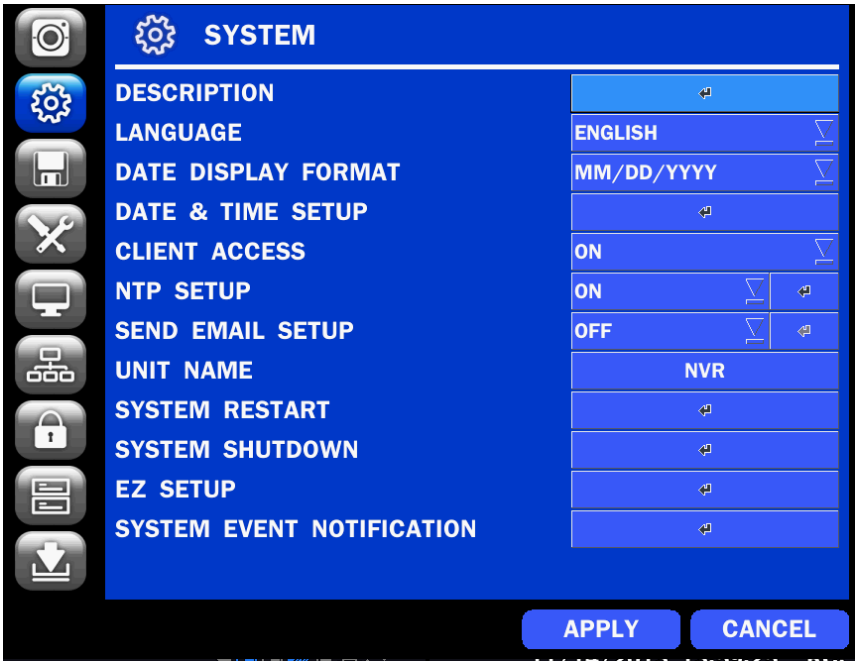


Figure 4.2.1. SYSTEM Setup Screen

Table 4.2.1. Menu Items in SYSTEM Setup Screen

Item	Description
DESCRIPTION	Press the button to view the system information. (Software Version, Storage Size, IP Address, MAC Address and DDNS Status) MODEL NAME N4ZS SOFTWARE VERSION Ver 3.8.2_20131114 STORAGE SIZE 870 GB IP ADDRESS 172.16.2.38 MAC ADDRESS 00:02:69:FF:F2:E2 DDNS STATUS DDNS OFF OK
LANGUAGE	Select the display language using the mouse or the remote control. Once a language is selected, the display language will change.
DATE DISPLAY FORMAT	Select the date display format using the mouse or the remote control. Options are: MM/DD/YYYY, YYYY/MM/DD, DD/MM/YYYY, YYYY-MM-DD, MM-DD-YYYY, DD-MM-YYYY
DATE&TIME SETUP	Select the display date and time using the mouse or the remote control and press OK button to set the present date and time. TIME DISPLAY FORMAT 24-HOUR FORMAT TIME ZONE GMT -5:00 (Montreal/New York) DAYLIGHT SAVING USA SET DATE & TIME 2013 / 12 / 9 13 : 45 : 3 OK CANCEL

Select DAYLIGHT SAVINGS using the mouse or the remote control and select the appropriate daylight savings time zone. The options are:

OFF: Daylight saving is turned off.

USA: Applies the USA daylight saving time.

EU: Applies the EU daylight saving time.

- Select the GMT AREA using the mouse or the remote control.
- Set the time difference with the standard time using the mouse or the button.

OTHERS: If the time zone is neither USA nor EU, set the date and time of the daylight saving period.

- Select BEGIN or END.

Caution

- Do not set the start time to 23:00 for DLS.
- DLS cannot be applied if the date of BEGIN and END is the same.

CLIENT ACCESS

Enable/Disable remote access through the network.

NTP SETUP

NTP (Network Time Protocol) which synchronizes the time of the computer systems over variable-latency data networks.

PRIMARY SNTP SERVER: Input the address of the primary NTP time-server.

SECONDARY SNTP SERVER: Input the address of the secondary NTP time-server.

TIME ZONE: NTP synchronizes with GMT (Greenwich Mean Time) regardless of geography; user must select time difference from GMT.

CONNECTON MODE: Select the NTP time-server connection mode from TIME, INTERVAL, and ONCE.

CONNECTION PERIOD

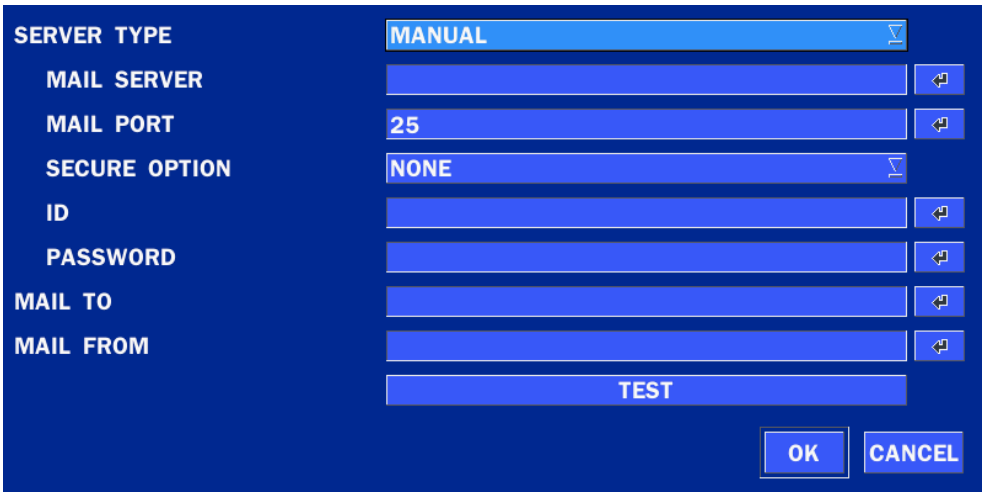
- **TIME** – Refresh the time at the designated time (e.g. 1AM)
- **INTERVAL** – Every 1 hour ~ 24 hours
- **ONCE** – Synchronizes time only once. NTP will not synchronize unless the Connection Mode is changed.

ZS sends E-MAIL Notification when the NTP server time is faster than the system time with below message.

“NTP server time is faster than the system time.

In this case, NTP server time is ignored to protect the user data.

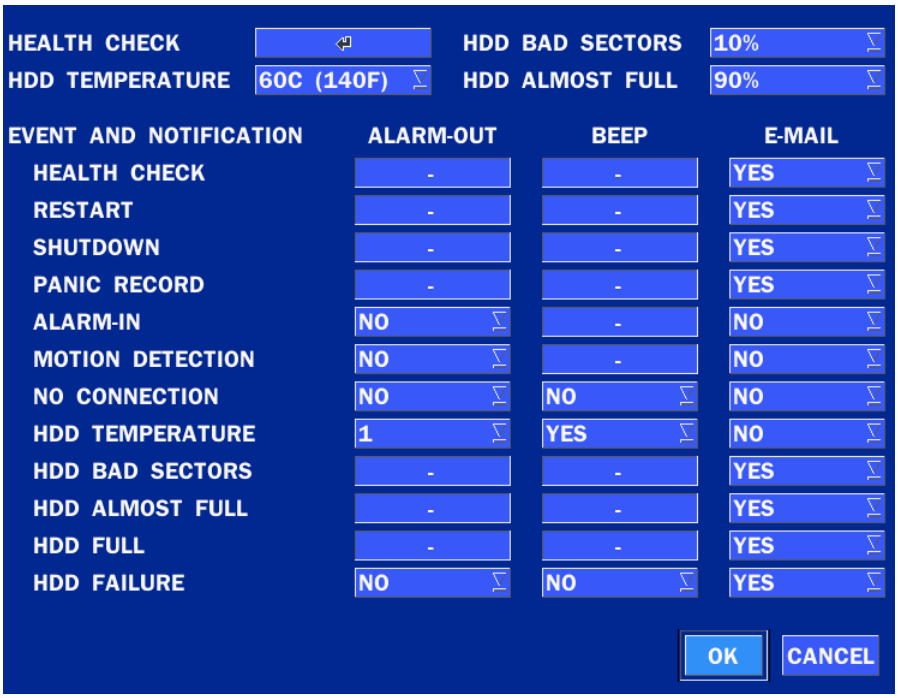
User must set the time manually.

	SYSTEM TIME: Mon Oct 10 13:46:49 2011 SERVER TIME: Mon Oct 10 13:33:12 2011 ZS ID: ZS IP ADDRESS: 172.16.2.46”
SEND EMAIL	 **SERVER TYPE: Select GMAIL, HOTMAIL, AOL, YAHOO or MANUAL)** **MAIL SERVER:** Enter the appropriate mail server information. **MAIL PORT:** Assign Mail Port number. **SECURE OPTION:** Select the secure mail server connection method. **(SSL or TLS)** **ID:** Enter the appropriate mail server ID. **PASSWORD:** Enter the appropriate mail server PASSWORD **MAIL TO:** Enter the appropriate email address to enable sending e-mail reports using a virtual keyboard. **MAIL FROM:** To set the email address sent to the destination host. **TEST** : E-mail settings sent a test mail to the registered account
UNIT NAME	Name the ZS (e.g. Factory) This feature is to identify the name of the ZS under the same network.
SYSTEM RESTART	Restart the system
SYSTEM SHUTDOWN	Shut down the system
EZ SETUP	Quick installation Menu for ZS and IP Camera Easy installation

SYSTEM

EVENT

NOTIFICATION



HEALTH CHECK – OFF, ON

(Allows the user to set MAIL STATUS periodically) : DAILY or WEELY or MONTHLY

EVENT AND NOTIFICATION – OFF, ON

(Allows the user to set EVENT NOFICIATION ON or OFF)

HEALTH CHECK / RESTART / SHUTDOWN / PANIC RECORD

- Enable Email Notification in the event a problem occurs with the ZS.

ALARM-IN – Enable Email Notification when the camera detects sensor.

MOTION DETECTION – Enable Email Notification when the camera detects motion.

NO CONNECTION – Enable Email, Beep and Alarm output Notification when the camera signal is lost.

HDD TEMPERATURE – Enable Email, Beep and Alarm output Notification when the HDD temperature.

HDD BAD SECTORS – Enable Email Notification when the HDD has bad Sectors.

HDD ALMOST FULL – Enable Email Notification when the HDD is almost full

HDD FULL – Enable Email Notification when the HDD is full

HDD FAILURE – Enable Email, Beep and Alarm output Notification when the HDD fails.

4-3. Setup – RECORD Mode

In the SETUP menu, select the RECORD tab. Then, the RECORD menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

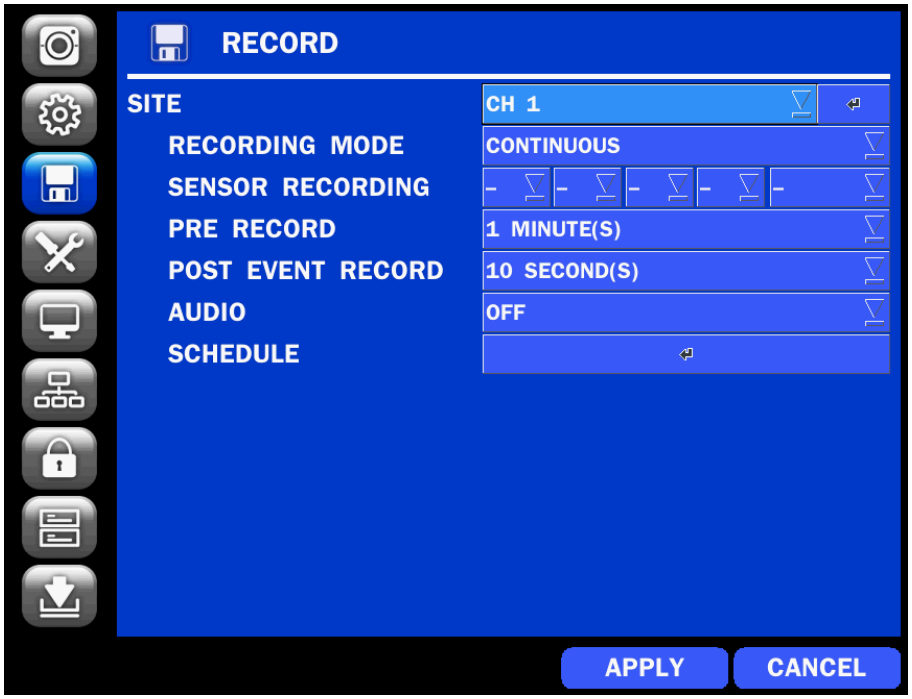
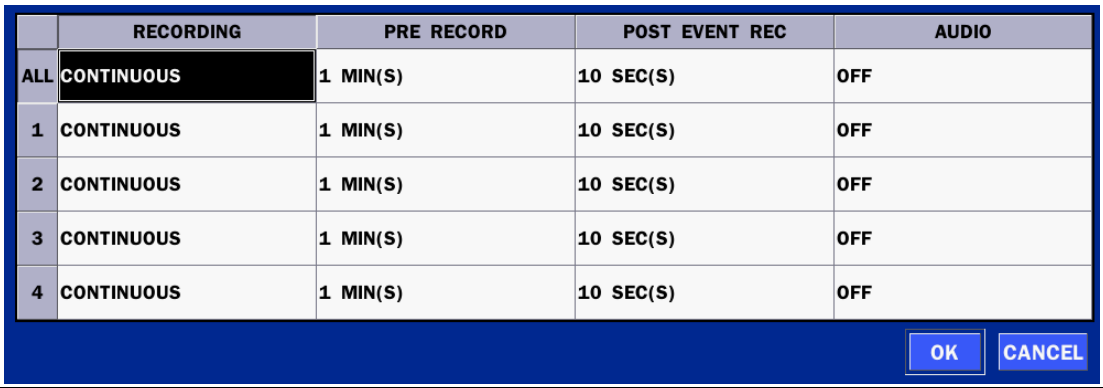


Figure 4.3.1. RECORD Setup Screen

Table 4.3.1. Menu Items in RECORD Setup Screen

Menu Item	Description
SITE	Select a channel for applying the following settings using the mouse or the remote control. To change the values of all channels, take the following steps. Select the button ⏎ to change the values of all channels.
RECORDING MODE	Assign the recording mode for the selected channel. Options are: Continuous, Motion, Schedule or Disable.
SENSOR RECORDING	Select the sensor setting for the selected channel.
PRE RECORD	Enable/disable pre-event recording. Pre-event recording time is up to 20 minutes.
POST EVENT RECORD	Set the post event recording time duration for the specified channel. (10~30 seconds)


RECORDING
PRE RECORD
POST EVENT REC
AUDIO
ALL CONTINUOUS 1 MIN(S) 10 SEC(S) OFF
1 CONTINUOUS 1 MIN(S) 10 SEC(S) OFF
2 CONTINUOUS 1 MIN(S) 10 SEC(S) OFF
3 CONTINUOUS 1 MIN(S) 10 SEC(S) OFF
4 CONTINUOUS 1 MIN(S) 10 SEC(S) OFF
OK
CANCEL

AUDIO	Enable/disable audio recording for the specified channel.
SCHEDULE	To setup a recording schedule, select SCHEDULE in the RECORD menu. Navigate through the menu items or change the settings using the mouse or the remote control. Select CHANNEL > select NONE, CONTINUOUS, MOTION or SENSOR > Highlight area To copy a schedule to a different channel, select the channel from the COPY SCHEDULE menu.

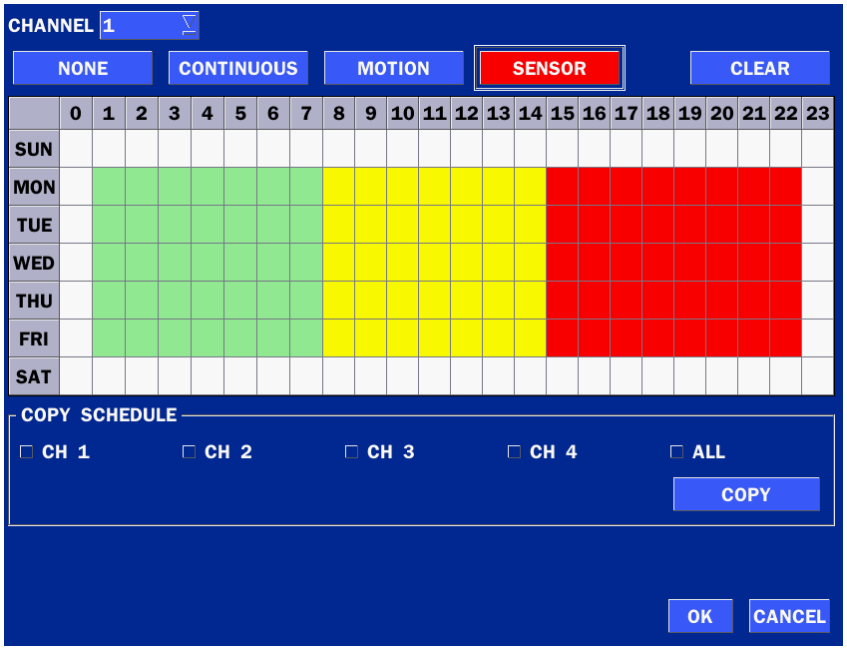


Figure 4.3.2. Schedule Recording Setup Screen

- **NONE**: Disable recording during selected timeframe (Highlighted in White)
- **CONTINUOUS**: CONTINUOUS recording (Highlighted in Green)
- **MOTION**: MOTION recording (Highlighted in Yellow)
- **SENSOR**: SENSOR recording (Highlighted in Red)
- **CLEAR** : Clears the schedule

4-4. Setup – DEVICE Mode

In the SETUP menu, select the DEVICE tab. Then, the device menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

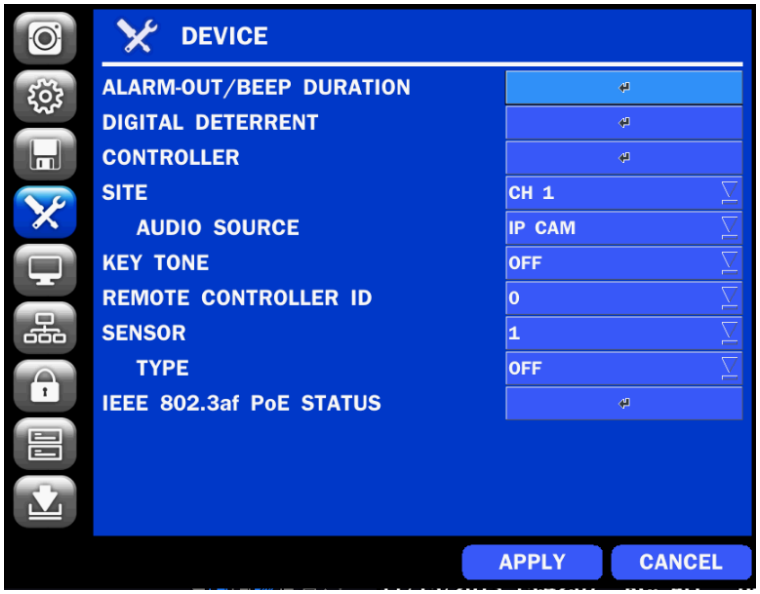
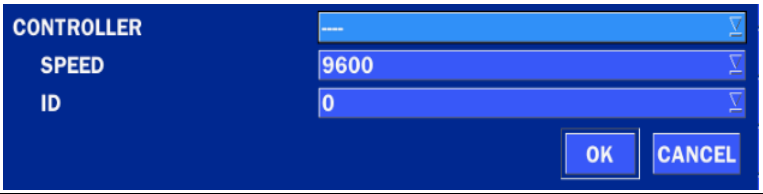
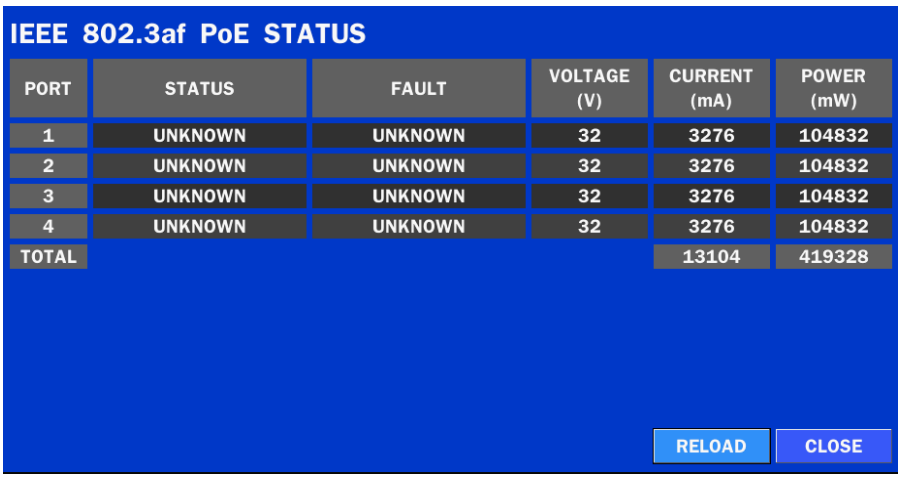


Figure 4.4.1. DEVICE Setup Screen

Table 4.4.1. Menu Items in DEVICE Setup Screen

Item	Description
ALARM OUT / BEEP DURATION	Only one Alarm-out is available. Set alarm dwell time from 5 to 60 seconds or infinite.
DIGITAL DETERRENT	Setup schedule and audio recordings for Digital Deterrent.
CONTROLLER	Set the controller speed, type and ID. 
SITE	Select specified channel for audio source setup.
AUDIO SOURCE	Select IP CAM Audio or Local Audio.
KEY TONE	Enable/disable key tone from front panel usage.
REMOTE CONTROL ID	Set the remote control ID. 1. Select ID. 2. Input the remote control ID number. 3. An icon will indicate on the Live Screen if the remote control ID is synchronized.

	The options are from 0 to 99
SENSOR	Select the type of each sensor. Option is Off, Normal Open or Normal Close.
IEE 802.3af POE STATUS	POE (Power Of Ethernet) Status Monitoring Menu



4-4-1. Digital Deterrent

Trigger audio message via motion detection or sensor.

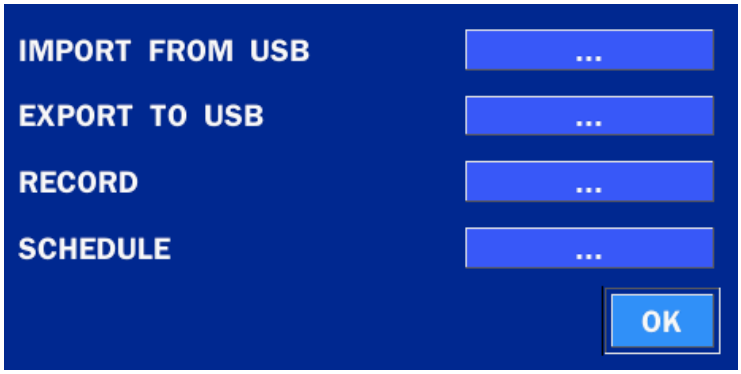
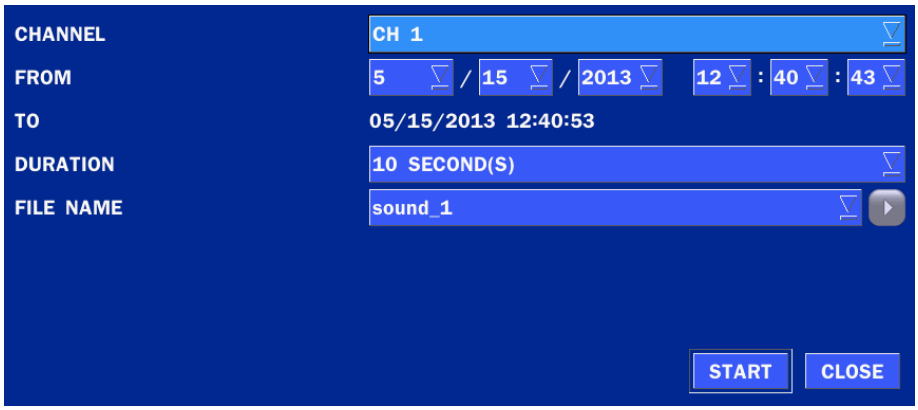
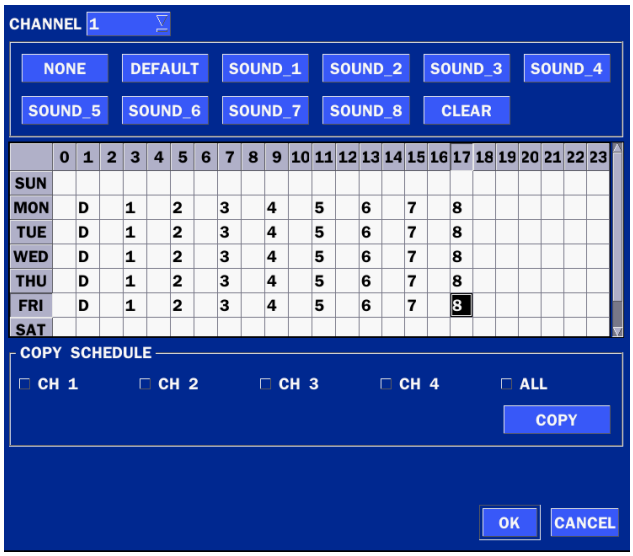


Figure 4.4.2. Digital Deterrent setup screen

Table 4.4.2. Item for Digital Deterrent Setup Screen

Item	Description
IMPORT FROM USB	Import up to 8 sound files from USB.
EXPORT TO USB	Export the sound file to USB
RECORD	Select a channel and set up the date and the duration. And, select the sound file to play. 
SCHEDULE	Schedule the sound file considering the expected situation. 

4-5. Setup – DISPLAY Mode

In the SETUP menu, select the DISPLAY tab. Then, the DISPLAY menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control. To return to the previous setup menu screen, press the ESC button.

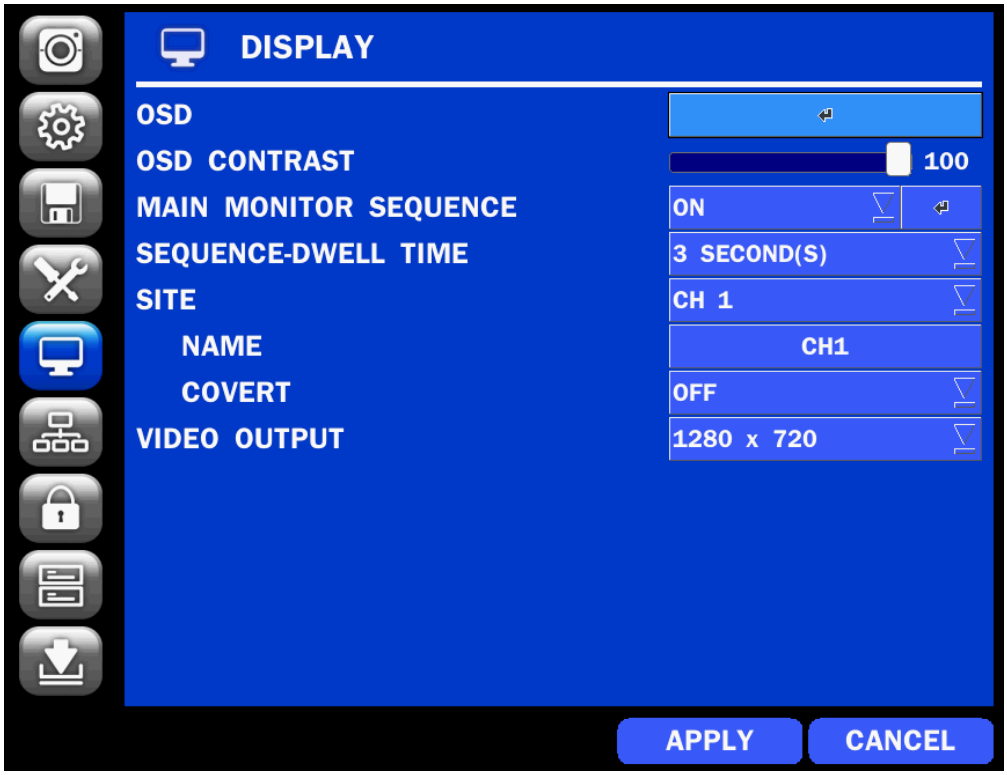
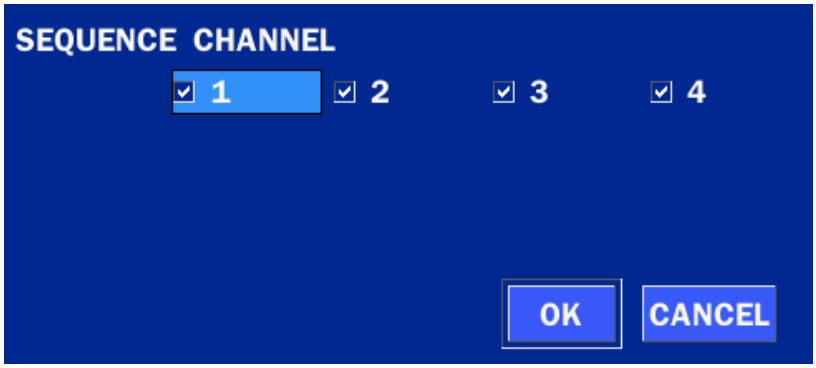


Figure 4.5.1. DISPLAY Setup Screen

Table 4.5.1. Menu Items in DISPLAY Setup Screen

Item	Description
OSD	Enable/Disable on-screen-display.
OSD CONTRAST	Set the visibility level of the On Screen Display (OSD) (50~100)
MAIN MONITOR SEQUENCE	Enable/Disable sequential display of video in full screen mode. 

SEQUENCE **DWELL TIME**	Set the dwell time of each, single channel display in sequential display mode (3~60 seconds)
SITE	Select a channel to apply the name and covert settings change using the mouse or the remote control. Select a channel to apply the following settings using the mouse.
NAME	Set the channel name. Press the right square button and set the channel name and select OK using the mouse. The name can be made up to 10 characters.
COVERT	Enable/disable display of the specified video channel in live display.
VIDEO OUTPUT	Select 1280x720 or 1920x1080.

4-6. Setup – NETWORK Mode

Select the NETWORK tab. Then, the network menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

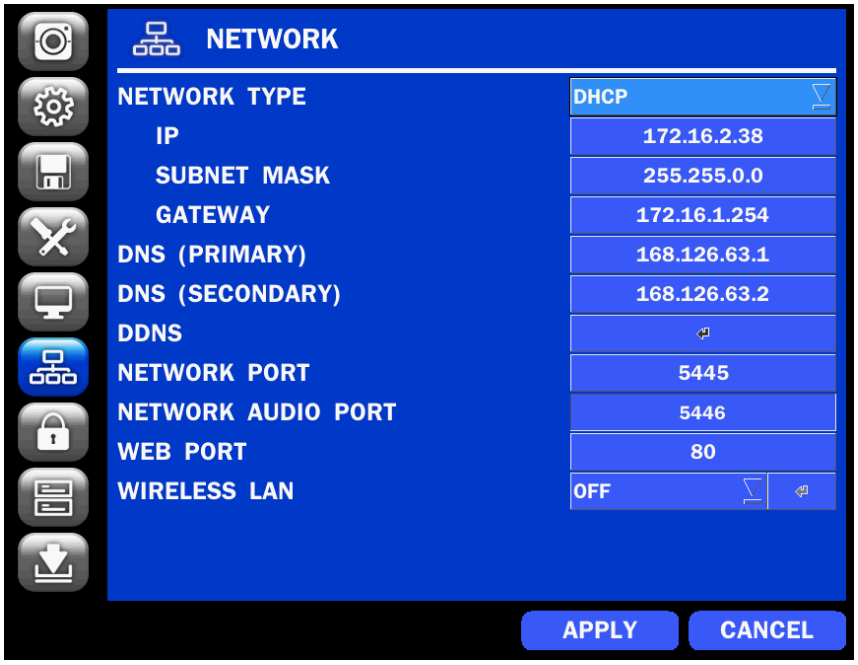


Figure 4.6.1. NETWORK Setup Screen

Table 4.6.1. Menu Items in NETWORK Setup Screen

Item	Description
NETWORK TYPE	**DHCP:** ZS will automatically retrieve an IP address. **STATIC:** Network information must be manually configured.
IP	Enter IP address that is assigned for the ZS
SUBNET MASK	Enter Subnet Mask that is assigned for the ZS
GATEWAY	Enter Gateway that is assigned for the ZS.
DNS (PRIMARY)	Enter Primary DNS address that is assigned for the ZS
DNS (SECONDARY)	Enter Secondary DNS address that is assigned for the ZS
DDNS	Dynamic Domain Name System (DDNS) allows a DNS name to be

	constantly synchronized with a dynamic IP address. In other words, it allows using a dynamic IP address to be associated with a static domain name so others can connect to it by the static name. Enable/disable using domain name address through DDNS server.
NETWORK PORT	Enter the port number.
NETWORK AUDIO PORT	Display the network audio port (NETWORK PORT + 1).
WEB PORT	Enter the port number for connection using web.
WIRELESS LAN	Wireless networks can be configured(option)

4-6-1. Network Types

4-6-1-1. DHCP

DHCP server automatically assigns the IP address and other parameters to new devices.

4-6-1-2. STATIC

IP address, Subnet Mask, Gateway, and DNS are manually assigned by the user.

- IP ADDRESS: The fixed IP address of the ZS unit.
- SUBNET MASK: The subnet mask for the LAN.
- GATEWAY: The IP address of the Gateway.
- DNS (PRIMARY) The primary address of Domain Name Server
- DNS (SECINDARY): The secondary address of Domain Name Server

NOTE

Unless DNS is properly set, the DDNS and the e-mail features will not work.

4-6-2. DDNS

DDNS (Dynamic Domain Name System) allows a DNS name to be constantly synchronized with a dynamic IP address. It allows using a dynamic IP address to be associated with a static domain name.

Once the setting is completed, the DDNS address will be:

http://**hostname**.ddns.specoddns.net

For example, if you enter the host name as “ZS”, then the address will be:

http://ZS.ddns.specoddns.net

Select NETWORK>DDNS. The menu displays as below.

Figure 4.6.2. NETWORK Setup Screen – DDNS

Table 4.6.2. DDNS

Item	Description
ENABLE DDNS	Turn DDNS on/off
HOST NAME	This item allows the user to setup a domain name manually, using virtual keyboard displays as shown.
SUBMIT/UPDATE	When manual host name input is done, move the cursor to this item and select ON to submit the settings.
ezDDNS	Enable/disable ezDDNS to register the host name automatically.

4-6-3. Network Port and Web Port

Connecting ZS through a common IP sharing device, each ZS must be assigned a unique TCP port number for access from outside the LAN. This port number is displayed on NETWORK>NETWORK PORT Setup MENU.

NOTE:

If you access the ZS only within the same LAN, the TCP port number does not need to be changed.

Network access beyond a router

To access ZS beyond a router (firewall), you must open the proper TCP ports for live/playback streaming, for commands, for remote backup, and for audio streaming. If these ports are not opened properly, you can't access the ZS beyond a router.

- **For live/playback streaming, for commands, for remote backup**: Open the port number on NETWORK>NETWORK PORT menu. The default port number is 5445.
- **For bi-directional audio:** Open the port number on NETWORK AUDIO PORT. The default port number is [NETWORK PORT number + 1].
- **For web-viewer downloading and remote firmware upgrading**: Open the port number on NETWORK>WEB PORT menu. The default port number is 80.
- **For IP Camera Setup through web viewer**: Forward ports 59011 ~ 59254 to the ZS.

4-7. Setup – USER MANAGEMENT Mode

In the SETUP menu, select the USER MANAGEMENT tab. Then, the USER MANAGEMENT menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

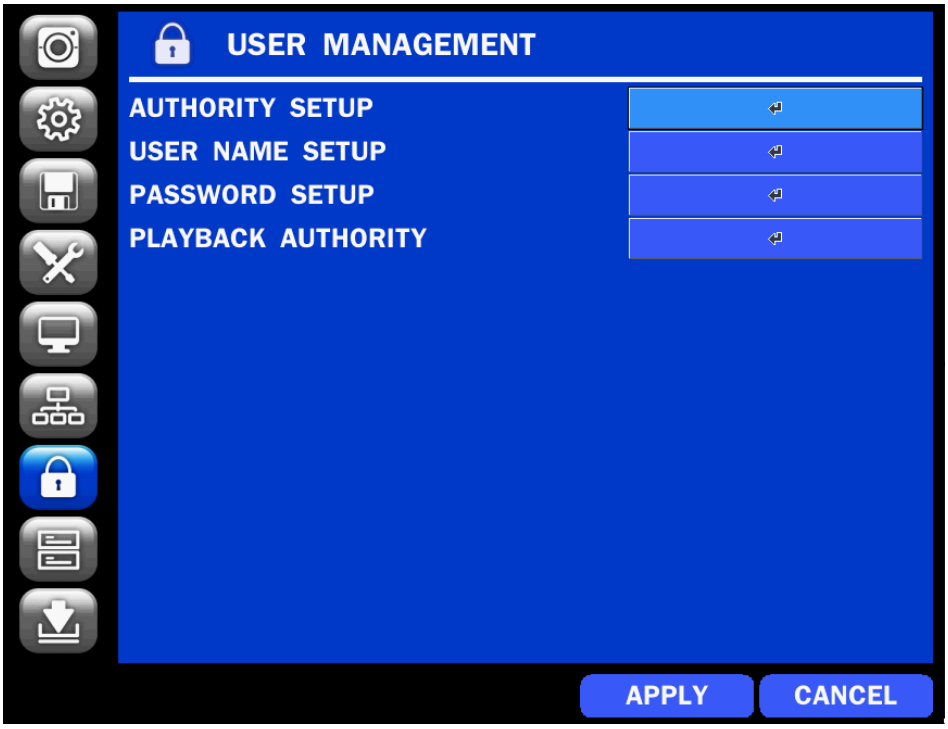
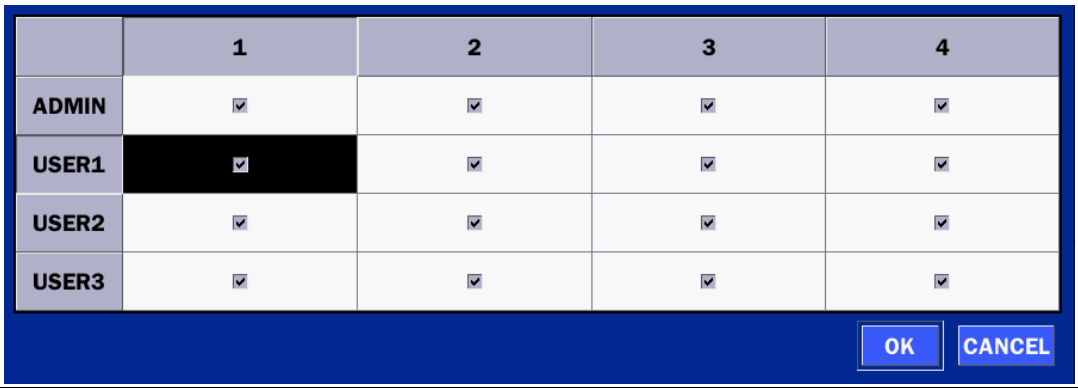


Figure 4.7.1. USER MANAGEMENT Setup Screen

Table 4.7.1. Menu Items in USER MANAGEMENT Setup Screen

Item	Description
AUTHORITY SETUP	Only the Admin will have access to the menu. **PASSWORD CHECK:** Select the Checkbox to enable the functions or leave the Checkbox blank to disable the functions. • **SETUP: Enable/Disable access to Setup** • **PB: Enable/Disable access to Playback** • **PTZ: Enable/Disable access to PTZ Control** • **REC OFF: Enable/Disable manual Record** • **NETWORK: Enable/Disable access to Network** Selected Checkbox: The ZS will ask for a password when the given function is selected for all users. Blank Checkbox: The ZS will not ask for a password when the given function is selected for all users.

	ADMIN, USER1, USER2, USER3: Selected Checkbox: The user can access the function. Blank Checkbox: The user can not access the function.
USER NAME SETUP	Change the name of USER1, USER2 and USER3. ● Click “ENTER” after naming.
PASSWORD SETUP	Passwords can be changed for ADMIN, USER1, USER2 and USER3. Select USER PASSWORD using the mouse or the remote control. Select username and enter the current password. And, enter a new password, enter the same password again to confirm and select OK. Then the message “PASSWORD CHANGED” is displayed. The factory default password is **1111**. **It is highly recommended to assign a new password to protect the system.**
PLAYBACK AUTHORITY	Set authority level of playback on each user. **Checked box**: authorized to playback. **Blank check box**: no authority. 

4-8. Setup – STORAGE Mode

In the SETUP menu, select the STORAGE tab. Then, the STORAGE menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

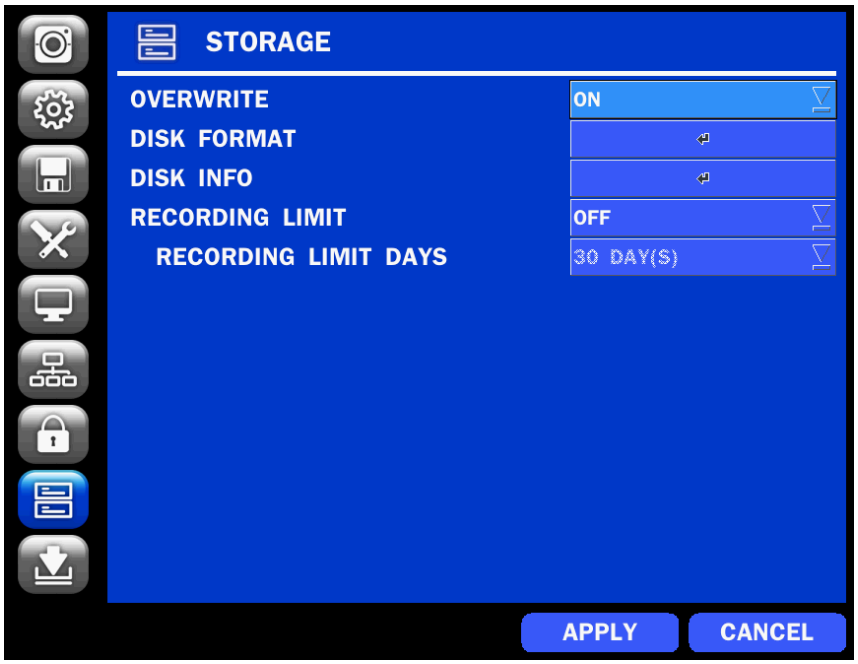
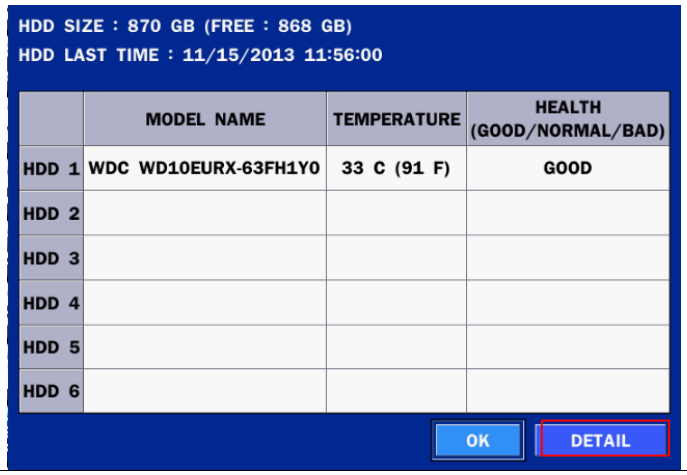
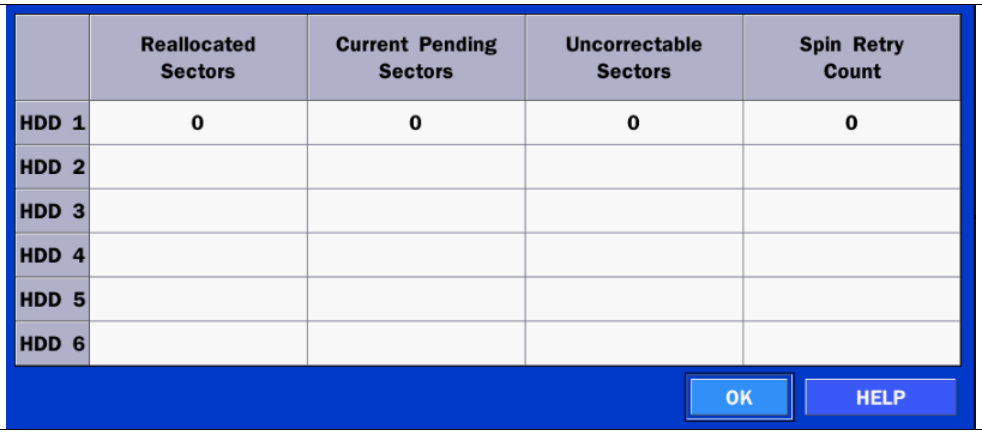


Figure 4.8.1. STORAGE Setup Screen

Table 4.8.1. Menu Items in STORAGE Setup Screen

Item	Description
OVERWRITE	When enabled, the ZS will continue recording and overwrite the oldest existing recorded data once the hard drive is full. When disabled, recording will stop once the hard drive is full.
DISK FORMAT	Once clicked, the user will have to confirm to format the Hard Drive. After confirming, the ZS will reboot, and the format sequence will load. The format sequence allows user to select which HDDs to format. **Caution: It is recommended to archive any data that you may need in the future before formatting the hard drive.**
DISK INFO	Hard drive information. Displays the following information: 



RECORDING LIMIT	**Enable recording limit : The amount of data recorded in HDD will be limited to the most recent number of days as set by "RECORDING LIMIT DAYS".** **Disable recording limit : When OVERWRITE is ON, DVR will continue to record when HDD is full and overwrite older data. When OVERWRITE is OFF, DVR will stop recording when the HDD is full.**
RECORDING LIMIT DAYS	Set the recording limit days. (1- 90 days) If the RECORDING LIMIT DAYS are set to 1, the data will be overwritten after 24 hours.

4-9. Setup - CONFIG Mode

In the SETUP menu, select the CONFIG tab. Then, the configuration menu is displayed as pictured below. Navigate through the menu items or change the settings using the mouse or the remote control.

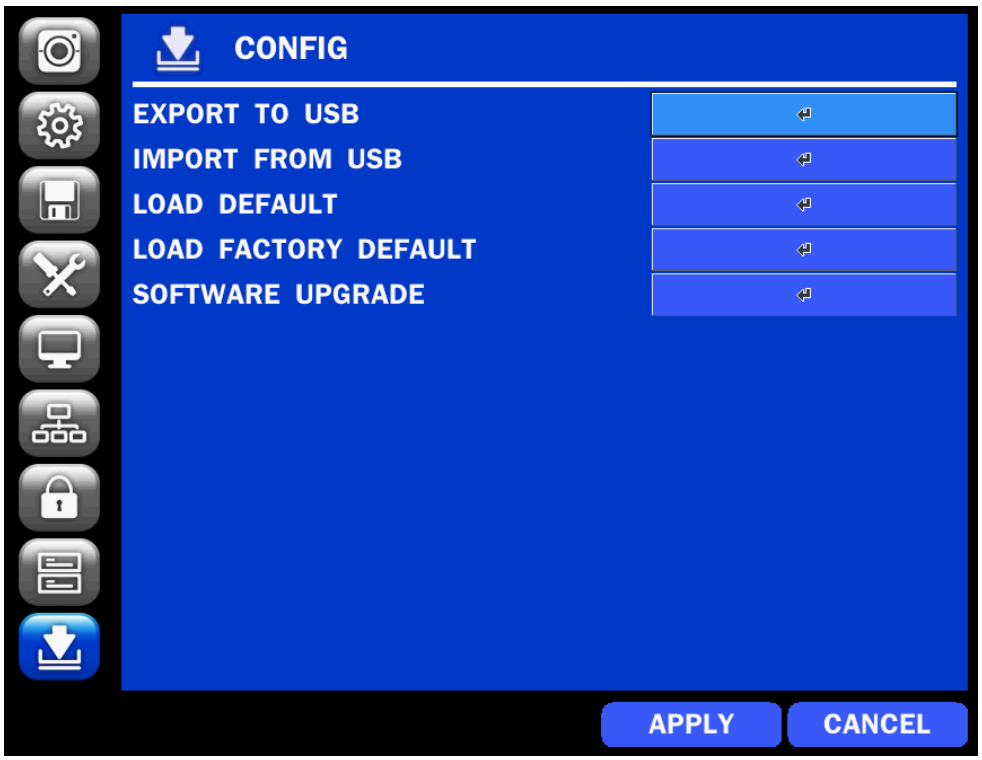


Figure 4.9.1. CONFIGURATION Setup Screen

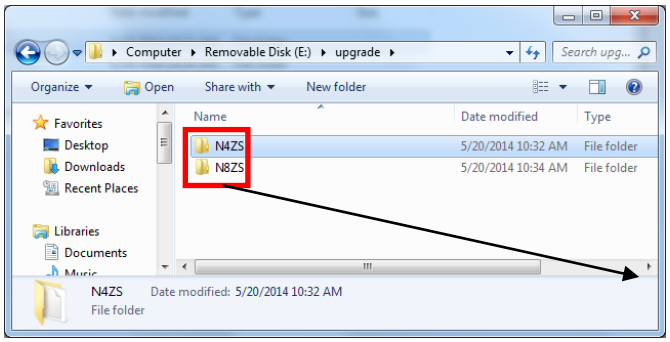
Table 4.9.1. CONFIGURATION Setup

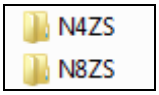
Item	Description
EXPORT TO USB	User can save the current configuration settings of the ZS to a USB flash drive. Plug in the USB flash on the front panel and press the button to start the export process.
IMPORT FROM USB	User can upload the configuration of the ZS to another ZS using the USB Flash drive. Plug in the USB flash drive on the front panel and press the button to start the import process.
LOAD DEFAULT	Select this option to reset the system to the default settings. The following settings such as **Language, ZS ID, Security User Authentication, Security User P/W, Date format, DLS settings, Network settings, HDD overwrite, Limit recording, HDD serial number, and HDD ERROR time** will not be included.
LOAD FACTORY DEFAULT	Press the button to reset the system to the factory default settings.

SOFTWARE UPGRADE	Upgrade softeware to the latest version. After connecting USB flash drive to USB port on the ZS, click SEARCH. It will automatically find the upgrade file.

4-9-1. Firmware Upgrade

1. Create a new folder named “upgrade” in the USB flash drive root directory.
2. Create sub-folder for each model under “upgrade” folder and copy each firmware.
   - “n4zs” for N4ZS: “main_n4ns_speco_*.*.*_201****”
   - “n8zs” for N8ZS: “main_n8ns_speco_*.*.*_201****”





3. Plug in the USB flash drive on the rear panel.
4. Navigate to CONFIG menu of SETUP.
5. Select SOFTWARE UPGRADE.
6. Follow the procedure from Figure 4.9.2 to Figure 4.9.4.

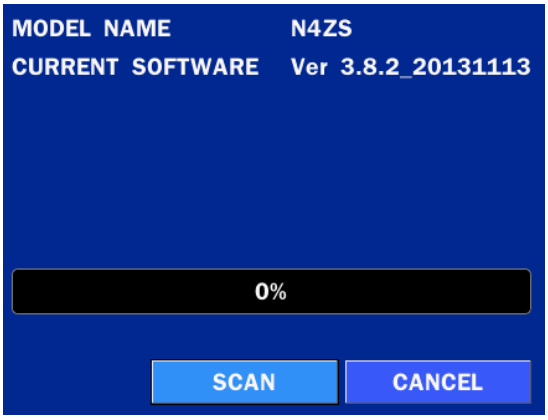


Figure 4.9.2

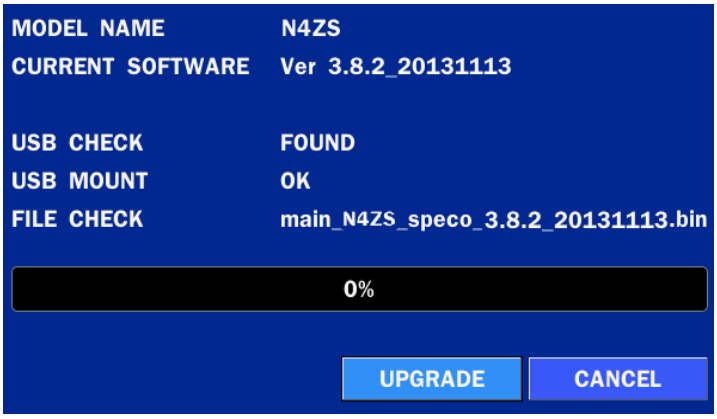


Figure 4.9.3

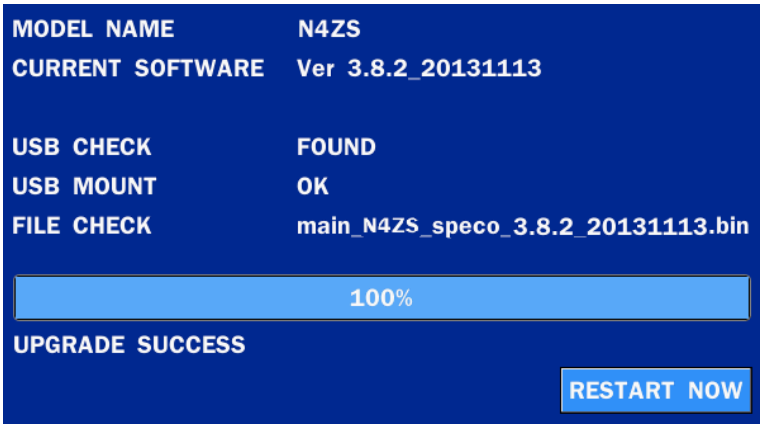


Figure 4.9.4

NOTICE

1. If selecting REBOOT LATER, the upgraded software will not be applied until the system reboots.
2. If selecting REBOOT NOW when the USB flash drive is plugged, the following message will pop up: Remove the USB flash drive and select OK.

5. Live, Search and Playback

5-1. Live View

In the Live screen, video inputs from the cameras are displayed as they are configured in the Display Setup screen. Various On-Screen Display (OSD) symbols, which indicate the status of the ZS, are described in Table 5.1.1.

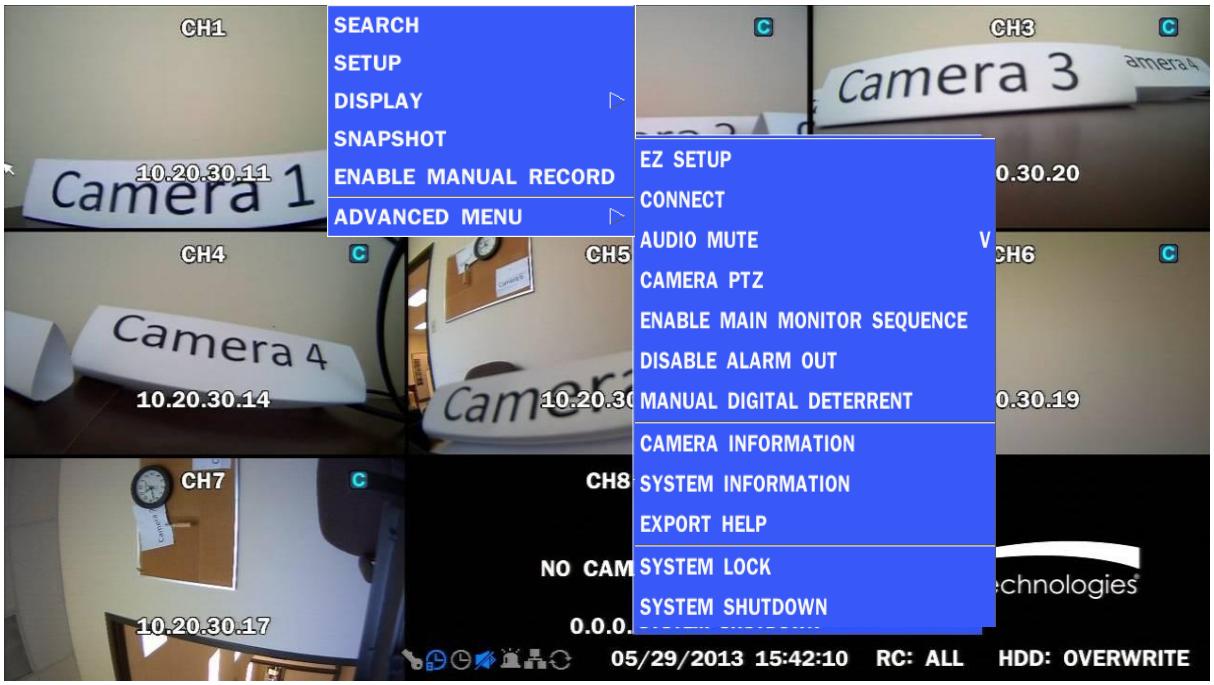


Figure 5.1.1. Live Screen and Quick Menu

Table 5.1.1. Status Indicator Icons in Live Viewing Screen

Icon	Description
	Indicates the ZS is locked. Note) to unlock, right click on the live view screen and click on Unlock.
	Indicates audio is muted on all channels.
	Indicates that alarm is set. To set the alarm function, press the Alarm button on the front panel.
	Indicates that alarm output is activated.
	Event indicator. When there is an event (motion recording, video loss, HDD fail, S.M.A.R.T), this icon will be highlighted.

	Indicates that a network client is connected to the ZS.
	Indicates that sequencing mode is enabled.
	Displays the current date and time.
	Remote control ID display. If a remote ID is not set, the message “ALL” is displayed.
	Displays the amount of recording on the hard disk from 0-99%.
	Indicates that HDD is recycled.
	Continuous recording in progress.
	Manual recording in progress. To set the Manual recording mode, press the Record button on the front panel.
	Motion alarm recording in progress.
	Sensor recording in progress.

Right click the mouse, and the Quick Menu will be displayed as below.

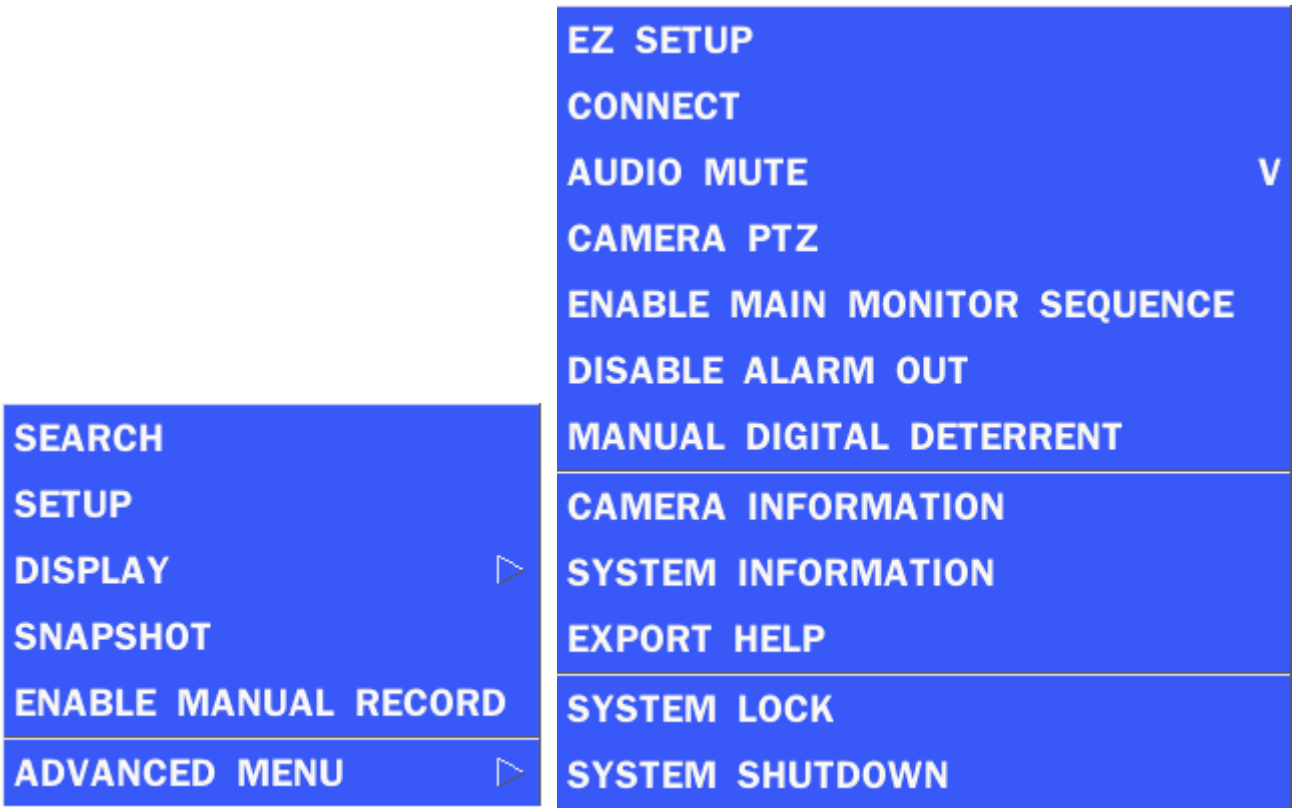
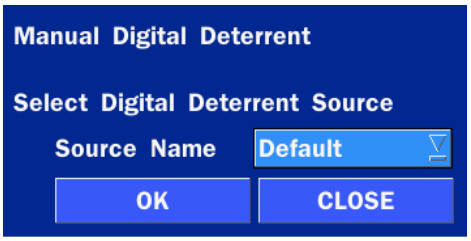
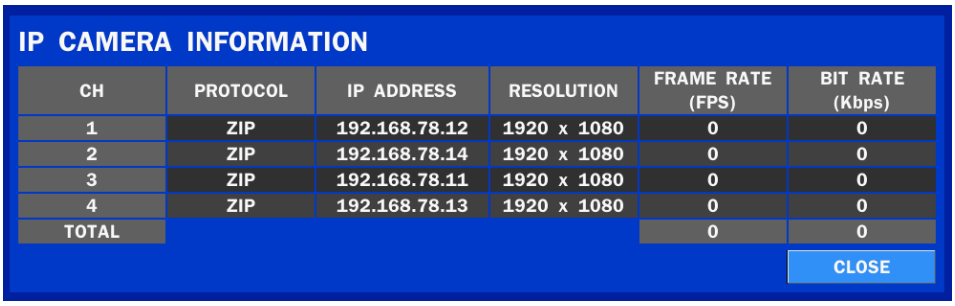
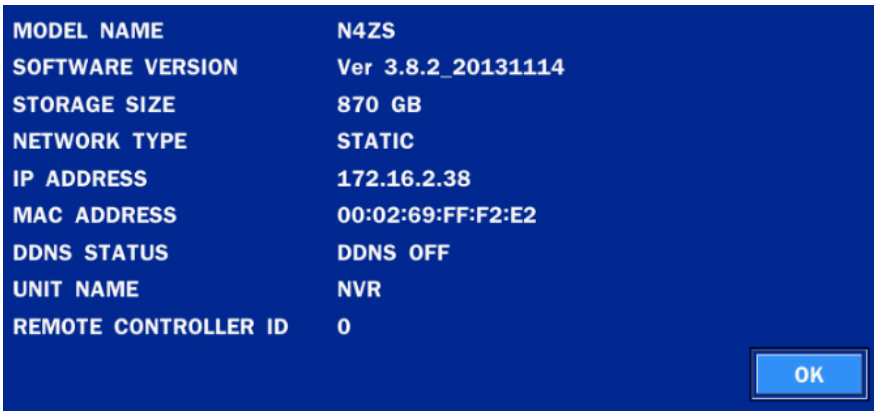


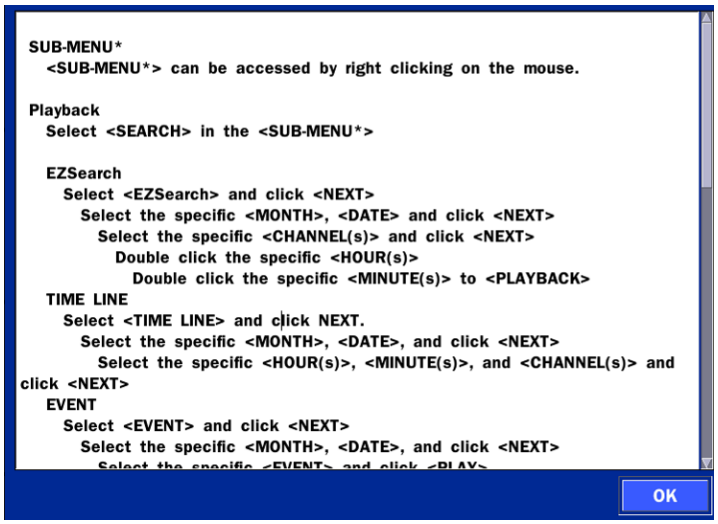
Figure 5.1.2. Quick Menu

Table 5.1.2. Menu Items in Quick Menu

Icon	Description
SEARCH	**Search button. Click this button to enter the search menu.**
SETUP	**Select this option to enter the Setup menu.**
DISPLAY	**Select between different multi-view display formats.**
SNAPSHOT	**Capture pictures and store as BMP files**
ENABLE MANUAL RECORD	**Manual Record button. Click this button to enable manual recording.**
ADVANCED MENU	
EZ SETUP	Select this option to start EZ Setup Wizard.
CONNECT	Select this option to disconnect/connect from IP Camera.
AUDIO MUTE	Select this option to mute audio on all channels.
CAMERA PTZ	Pop up the PTZ user interface.
ENABLE MAIN MONITOR SEQUENCE ON/OFF	Sequence button. Click this button to use a sequence function.
DISABLE ALARM OUT	Click this button to enable/disable Alarm outputs
MANUAL DIGITAL DETERRENT	Select this option to manually trigger any of the saved Digital Deterrent messages. 
CAMERA INFORMATION	Press the button to view the record setting of a selected channel. 
SYSTEM INFORMATION	Press the button to view the system information.



EXPORT HELP	Displays window with instructions for exporting video.

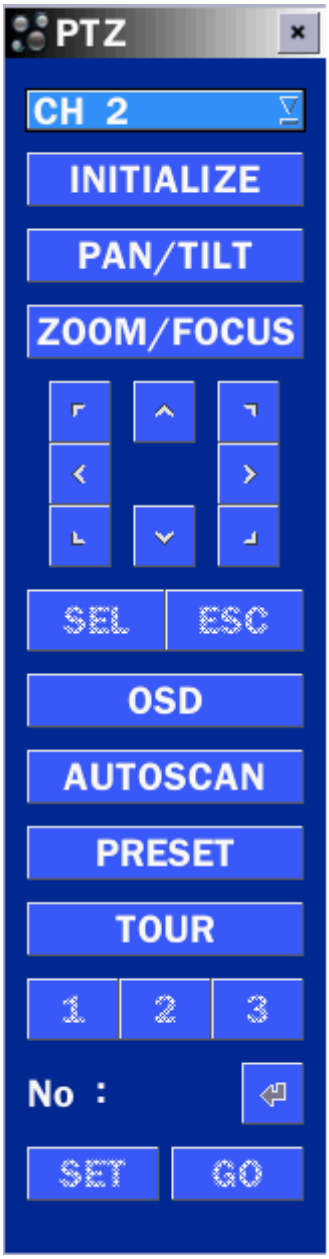


SYSTEM LOCK	Locks the ZS from unauthorized user access.
SYSTEM SHUTDOWN	Select this option to shutdown system.

5-1-1. PTZ Control

Table 5.1.3. Menu Items in PTZ Control Window

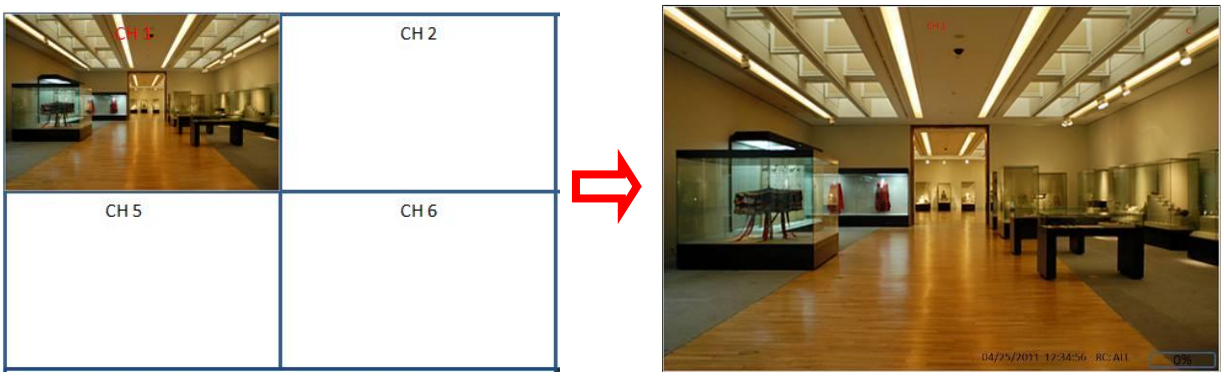
Item	Description
INITIALIZE	Initialize the PTZ settings of the selected camera
PAN/TILT	Select PAN/TILT using the ▲▼◀ and ▶button, then press **SEL**. Adjust the tilt (UP/DOWN) & pan (LEFT/RIGHT) position using the ▲▼◀and ▶buttons.
ZOOM/FOCUS	Select ZOOM/FOCUS using the ▲▼◀ and ▶ buttons, then press **SEL**. Adjust the zoom (UP/DOWN)/ focus (LEFT/RIGHT) position using the ▲▼◀ and ▶ buttons.
OSD	Select OSD to enter the menu. Control keys are Right, Left, UP, Down, Select, Far (REW KEY), and Near (FF KEY). Press the **ESC** button to return to the previous menu. Press the **PTZ** button to close the OSD menu.
AUTOSCAN	Press the right key (▶) to start auto scan. Press the left key (◀) to stop auto scan.
PRESET	Select PRESET, and then press the left key (◀). A number input window will appear. Set the number (3 digits) using the number key, and then press the SEL to confirm the preset number for the current position. Press the right key (▶) and enter the number (3digits) to go to the preset position.
TOUR	Select TOUR and press the right (▶) key. A number input window will open. Select a number (1 digit) using a number key, and then press SEL to start the tour. Press the left (◀) key to stop the tour. Preset the number of the tour group in the OSD menu.
NO.	For the TOUR and PRESET menu.
	Press ESC to return to the main menu



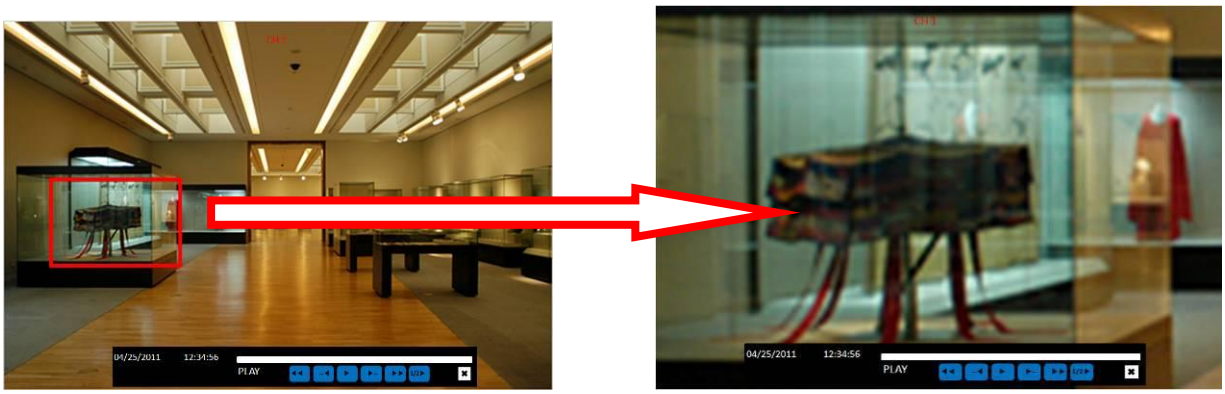
5-2. Digital Zoom in Live and Playback Screen

ZS series supports Digital Zoom feature during live and playback mode.

1. Double click the target channel.



2. Click the left button of the mouse and drag to make rectangular shape.



5-3. SEARCH Screen

To enter the search screen menu, select SEARCH menu on the screen using the mouse or press SEARCH icon on live screen.

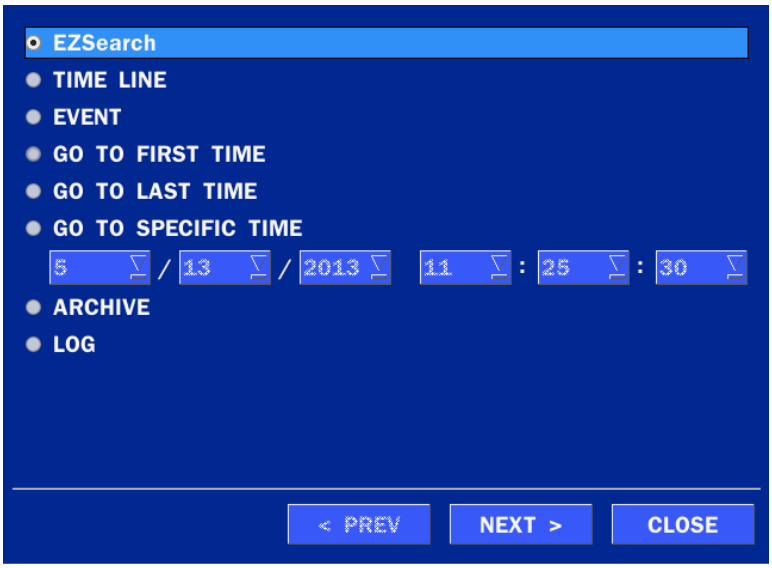


Figure 5.3.1. Search Screen

There are 7 playback options provided in the search menu, such as EZSEARCH, TIME LINE (Calendar), EVENT, GO TO FIRST TIME, GO TO LAST TIME, GO TO SPECIFIC TIME, ARCHIVE, and LOG on the screen.

5-3-1. EZSearch

The EZSearch window is used to find stored video with ease using the thumb nail playback screen.

Figure 5.3.2. Calendar Screen

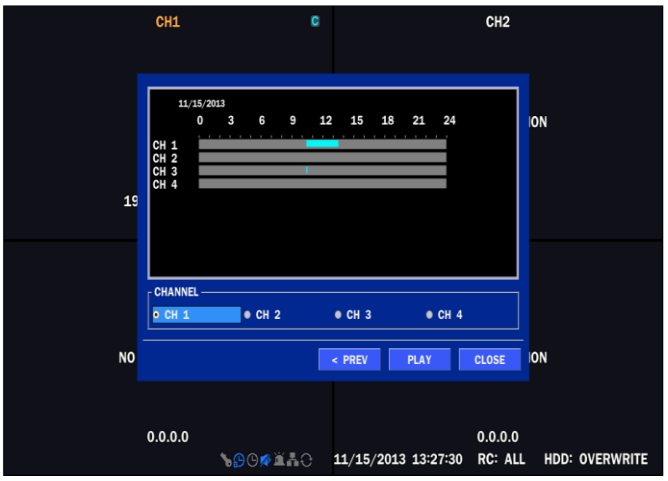


Figure 5.3.3. Channel Selection Screen

Figure 5.3.4. 24 Hourly Thumbnail Screen

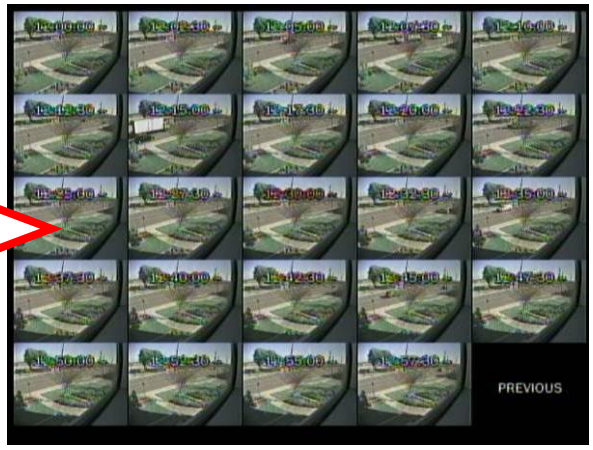


Figure 5.3.5. Minute Thumbnail Screen

Figure 5.3.6. Play Mode Screen

1. When the EZSearch menu is selected, the user can see a calendar, which displays recorded dates with highlights. Select a specific date on a calendar.
2. Select a channel from Channel Selection Screen. Then, 24 hourly thumbnail search screen displays.
3. Select the hourly thumbnail. Then the minute thumbnail search screen displays.
4. Select the thumbnail of minutes that you want to playback.

5-3-2. Time Line Search

The CALENDAR Search window is used to find the stored video by using the time line bar.

Figure 5.3.7. Calendar Screen

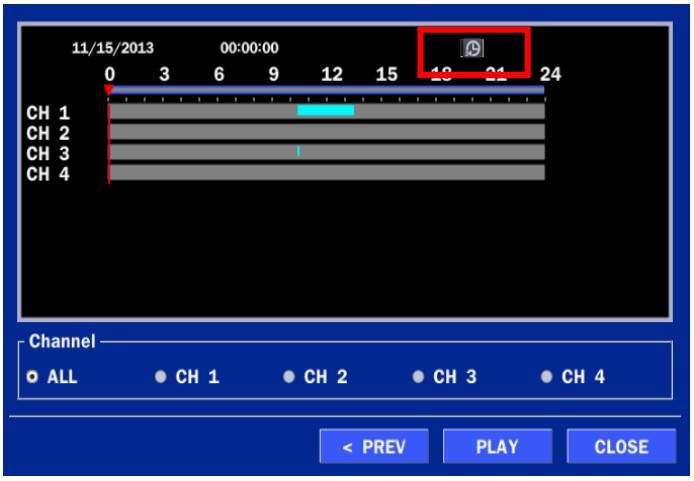


Figure 5.3.8. Time-Line Search Screen

When the Timeline menu is selected, the user can see a calendar, which displays recorded dates with highlights. Select a specific date and time. Click and drag the red time indicator bar to the desired hour. User can select specific minutes using a button in the above red box. Press the PLAY button after selecting the specific time. Press the PREV to return to the SEARCH window.

5-3-3. Event Search

The Event Search window is used to find stored video.

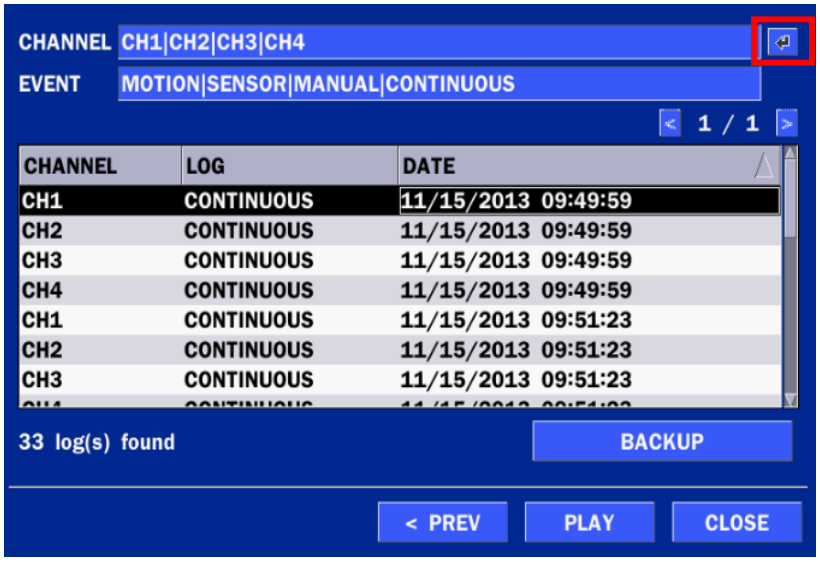


Figure 5.3.9. Event Search Screen

When the Event menu is selected, the user can see a calendar, which has recorded data. Select a specific date and the event log will be displayed. Press the PLAY button to playback the data or the SAVE button to save the data after selecting the specific data. User can find a data of the specific channel and event using a button in the above red box as following Figure 5.3.10. Press the PREV to return to the SEARCH window.

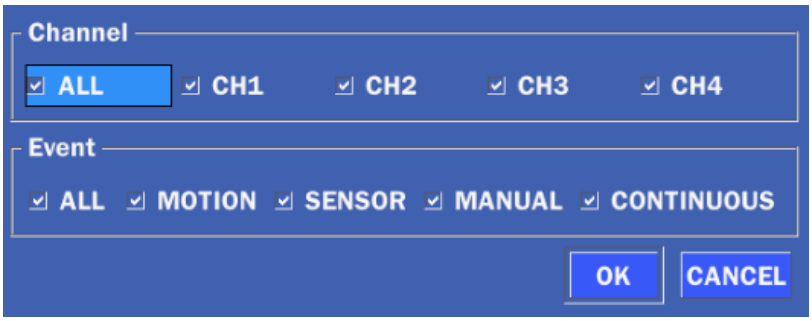


Figure 5.3.10. Event Search Screen

5-3-4. Go To First Time

User can access from the oldest recorded data on the ZS hard drive by selecting GO TO FIRST TIME on the SEARCH window. Press the PREV to return to the SEARCH window.

5-3-5. Go To Last Time

User can access from the last minute recorded data on the ZS hard drive by selecting GO TO LAST TME on the SEARCH window. Press the PREV to return to the SEARCH window.

5-3-6. Go To Specific Time

User can search for video data from a specific instance by setting the date and time in the GO TO SPECIFIC TIME menu. Use the mouse or the remote control to change the date and time value and press the PLAY button after setting. If there is no video data in the set date and time, No Data Exist message displays.

5-3-7. Archive List

The ARCHIVE Search window is used to find previously stored video or images.

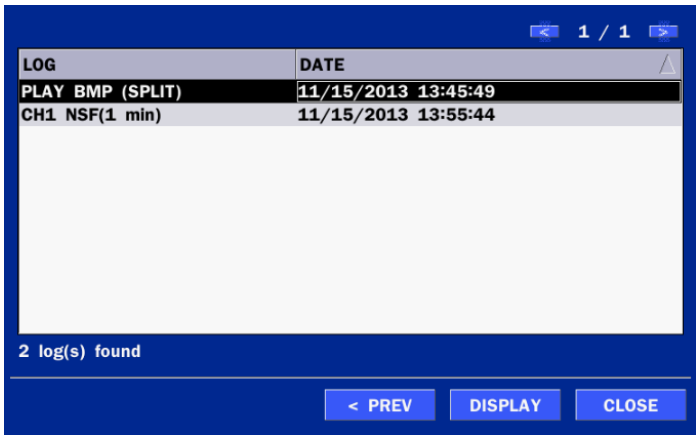


Figure 5.3.11. Archive Search Screen

When the Archive menu is selected, the user can see a calendar, which has recording data. Select a specific date and then the archived data will be displayed. Press the Display button to view the still image or the first frame of the selected video, then the user can save the selected data.

5-3-8. Log List

You can access the LOG list search screen by selecting LOG on the SEARCH window.

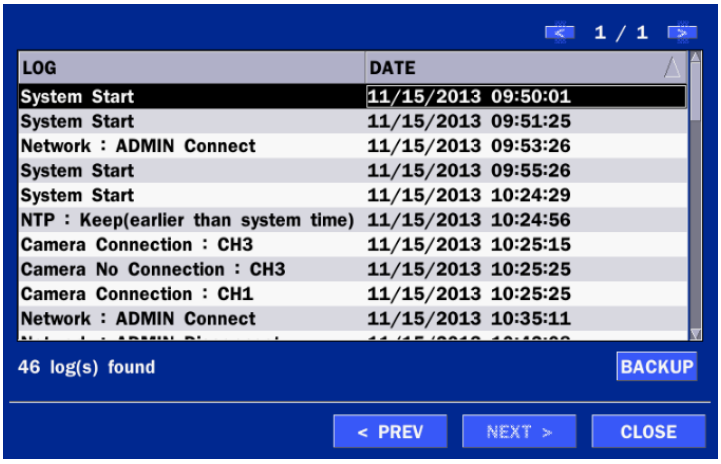

1 / 1
LOG
DATE
System Start 11/15/2013 09:50:01
System Start 11/15/2013 09:51:25
Network : ADMIN Connect 11/15/2013 09:53:26
System Start 11/15/2013 09:55:26
System Start 11/15/2013 10:24:29
NTP : Keep(earlier than system time) 11/15/2013 10:24:56
Camera Connection : CH3 11/15/2013 10:25:15
Camera No Connection : CH3 11/15/2013 10:25:25
Camera Connection : CH1 11/15/2013 10:25:25
Network : ADMIN Connect 11/15/2013 10:35:11
46 log(s) found
BACKUP
< PREV
NEXT >
CLOSE

Figure 5.3.12. Log List Screen

When the Log menu is selected, the user can see a calendar, which has a log data. Select a specific date and press NEXT button, and then the log data will be displayed. Press the SAVE button to save the data and then the data is saved as a text file format.

5-4. Play Mode

During playback of a recorded event, the mode changes from SEARCH to PLAY. While in PLAY mode, user may return to the SEARCH screen by pressing the X button on the status bar.

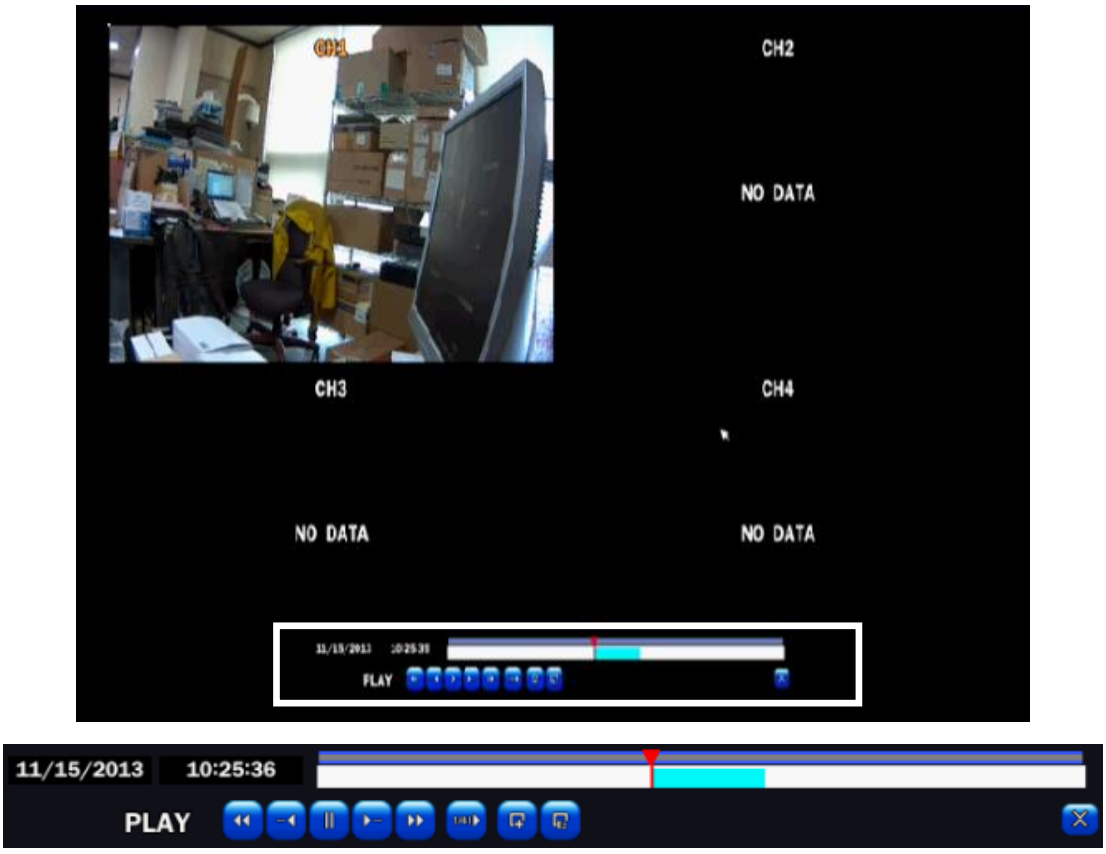


Figure 5.4.1. Play Mode Screen

The following status bar hides automatically and appears again if a mouse pointer is positioned to the bottom of the screen.

Table 5.4.1. Button Functions in PLAY Mode

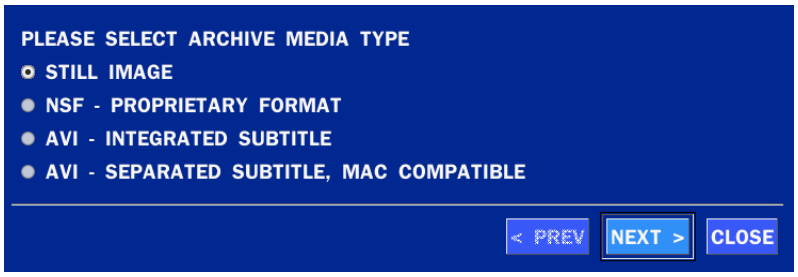
Button	Description
	• 2x, 4x, 8x,16x, 32x speeds at 2x2 screen display mode. • 2x, 4x, 8x,16x speeds at 3x3 screen display mode. • 2x, 4x, 8x speeds at the 4x4 screen display mode. • Single Channel backward playback speed 1x, 2x, 4x, 8x, 16x, 32x, 64x
	Jump/Step backward. The playback position moves 60 seconds backward.
	Press to play or pause recorded video.
	Jump/Step forward. Playback position moves 60 seconds forward.
	• 2x, 4x, 8x,16x, 32x speeds at 2x2 screen display mode • 2x, 4x, 8x,16x speeds at 3x3 screen display mode. • 2x, 4x, 8x speeds at the 4x4 screen display mode. • Single Channel forward playback speed 1x, 2x, 4x, 8x, 16x, 32x, 64x
	Slow Mode play. Forward playback speed x1/4, x1/2
	Press to Backup the video.
	EZCopy button.
	Return to the previous menu screen, search window, or exit from the Menu.

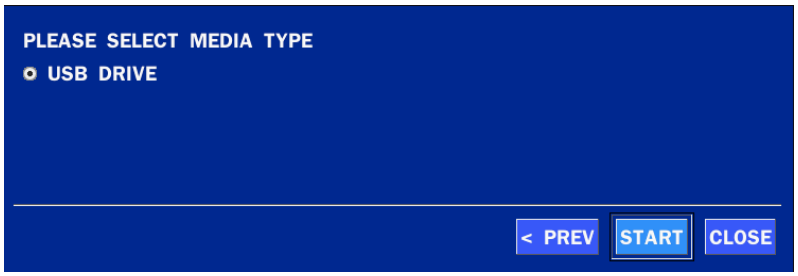
6. Back Up

6-1. Video Backup onto USB Flash Drive during playback

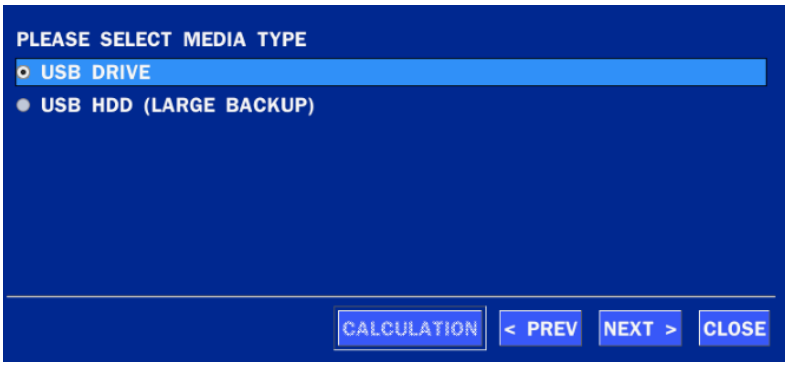
Video can be captured and archived onto the USB flash drive or a hard drive while playing back the recorded video. In playback mode, press the BACKUP button to launch the backup function.

1. When you press BACKUP button on the selected channel or all channels, the ZS will ask whether to archive a Still Image, a NSF or AVI and select the proper media type.

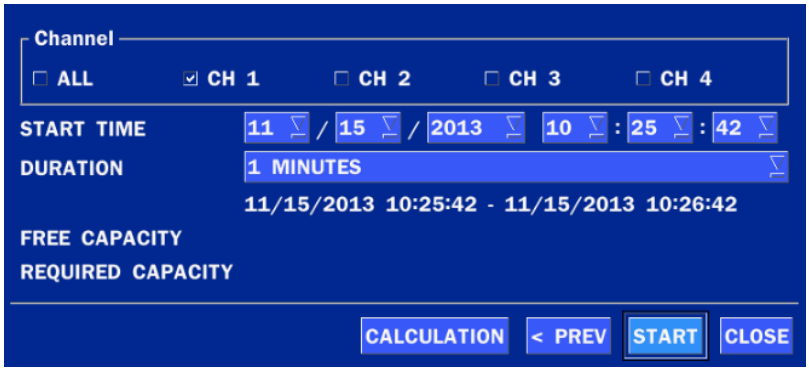




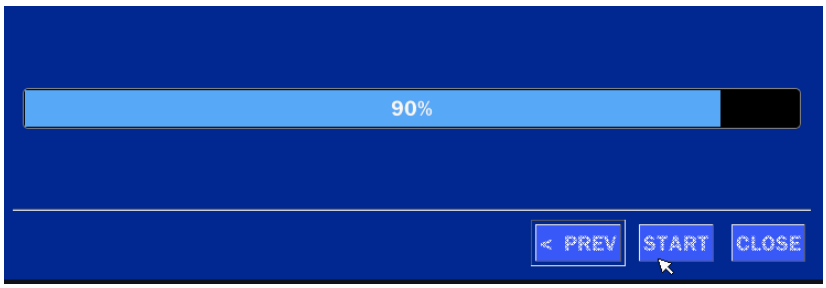
2. Select USB STICK (Flash Drive) to back up less than an hour.
   Select USB HDD (Large Backup) to back up from 1 hour to 24 hours. (Only for NSF type)



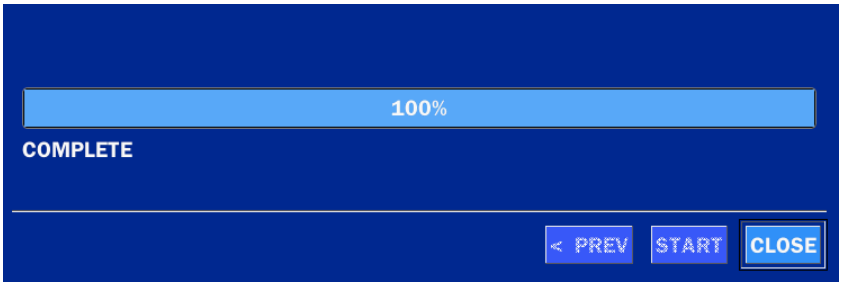
3. Once you select the channel and duration, the system will start to archive the data to the USB drive.



4. The following image shows the progress of archiving the data.



5. The following shows the image to complete the backup. Select close to return to the previous screen.

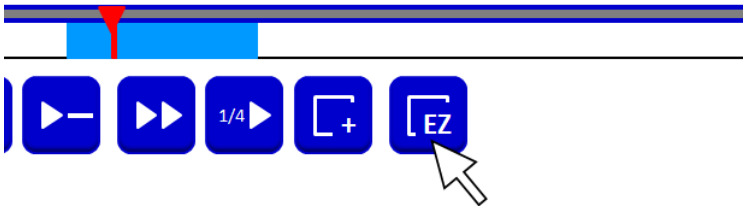


6-2. EZCopy: Video Backup onto USB Flash Drive during playback

Using EZCopy feature, Video can be easily archived onto the USB flash drive or a hard drive.

In playback mode, press the EZ **EZCOPY** button to launch the backup function.

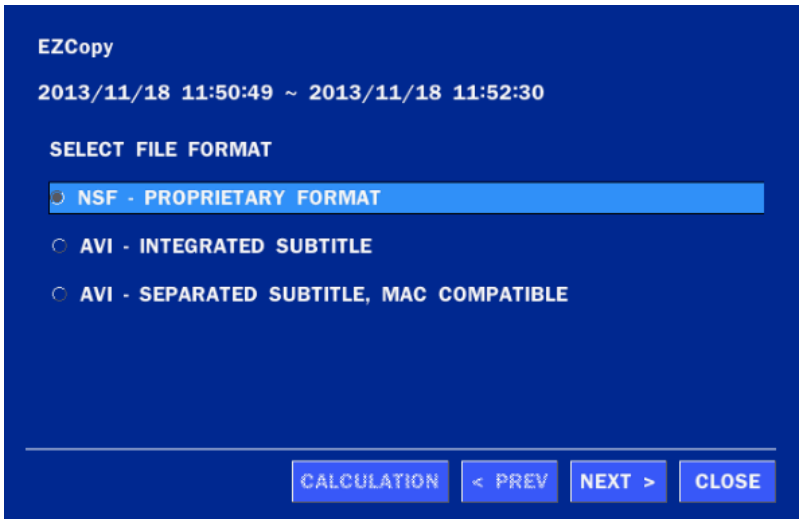
1. Press EZCOPY button on the selected channel or all channels.



2. Then, EZCOPY START time will display.

3. Move time bar cursor to the time of end of backup and press EZCOPY button. Then, EZCOPY STOP time will display.

4. EZCOPY window will display. The ZS will ask whether to archive a Still Image, a NSF or AVI.



5. After backup format is selected, also select media type and channel(s) to archive the data to the media.

6-3. Transferring Still Images or Video from the ARCHIVE List

The stored data in the hard drive can be found in the ARCHIVE list in the SEARCH window.

User can back up still images or video into the storage device from the ARCHIVE list.

1. Select the date to begin searching and navigate through the days using the mouse or the remote control.
2. Once you have selected the date, press the NEXT button to open the list of stored data.
3. Use the mouse or the remote control to scroll through the archive list.
4. Select a list of stored events in the archive list.
5. Once the desired event has been selected, press the DISPLAY button to view the still image or the first frame of the selected video.
6. Press the BACKUP button to launch the archiving function in playback mode.
7. Press the CLOSE button to return to the SEARCH window.

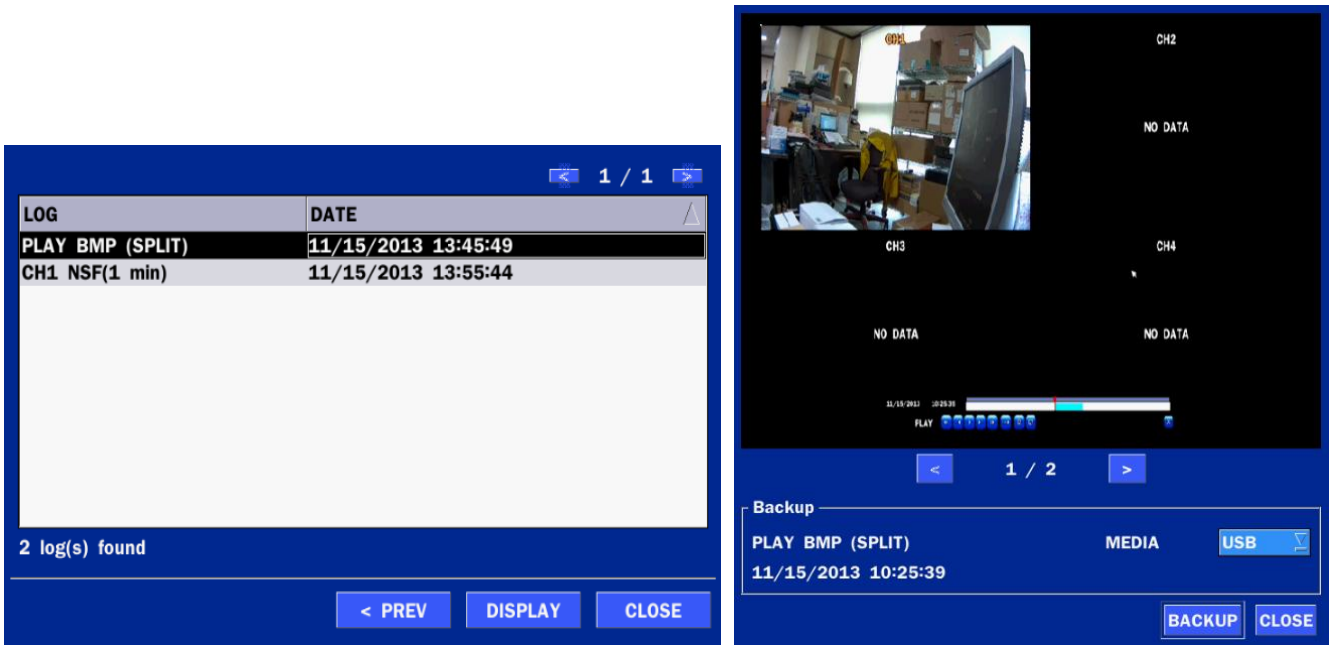


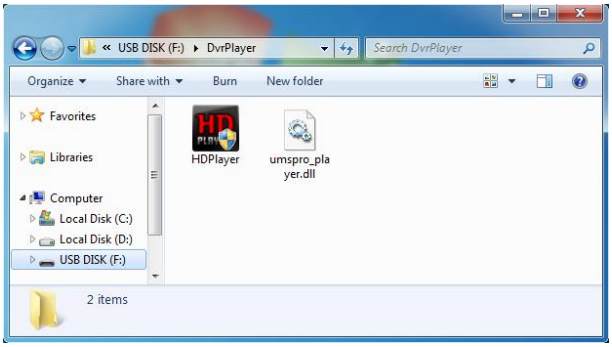
Figure 6.3.1. Archive Search Screen

6-4. Playback of Backup Video

6-5-1. AVI Format

AVI format: AVI format video can be played back by Window Media Player™ or other media player that is compatible with AVI format video.

1. Please install the ZS copies “HDPlayer” folder on USB flash drive with the video.



2. Otherwise, the video and time stamp over video can’t be properly played back and displayed on Window Media Player™.

Timestamp On AVI. The subtitle is embedded to the video clip file.

The subtitle is embedded to the AVI file.

6-5-2. NSF Format

NSF format: NSF format video can be played back using the HDPlayer that the ZS copies to “HDPlayer” folder on USB flash drive with video. Use the mouse scroll to use digital zoom in and out feature.

7. Network Access Using the Multi-Sites Network Viewer

7-1. Overview

The SpecoTech Multi Client is a multiple site monitoring client software with; video, audio, and alarm signals from the ZS over the network. The SpecoTech Multi Client does not limit the number of ZS units to register. The program displays up to 16 ZS units and supports dual monitors.

On the program, user may control PTZ cameras on the ZS. By attaching a microphone and speaker system to devices on site, the user may make bi-directional audio communication over the network.

7-2. PC Requirements

Minimum PC Requirements

CPU	Intel Core i3
	1.8Ghz
Memory	2GB DDR2
VGA	512MB
Resolution	1280x720
Disk Space	1GB
OS	Windows 2000, XP Professional, XP Home, Vista, 7 (NOTE: Not all versions of Vista and 7 are supported)
Network	10/100Base T
Others	Direct X 9.0c or Higher

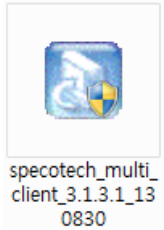
Recommended PC Requirements

CPU	Intel Core i5
	2Ghz or higher.
Memory	4GB DDR3 or higher.
VGA	512MB or higher.
Resolution	1920x1080
Disk Space	1GB
OS	Windows 2000, XP Professional, XP Home, Vista, 7 (NOTE: Not all versions of Vista and 7 are supported)
Network	10/100/1000Base T
Others	Direct X 10 or higher.

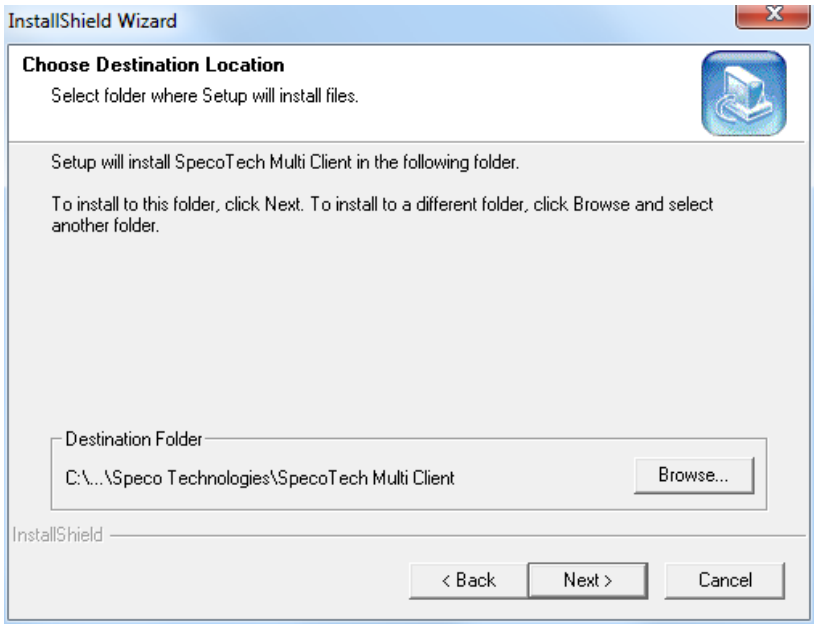
Before installing the program, check the PC specifications. The ZS remote software may not perform correctly if the PC does not meet the minimum requirements.

7-3. Installation of the Program

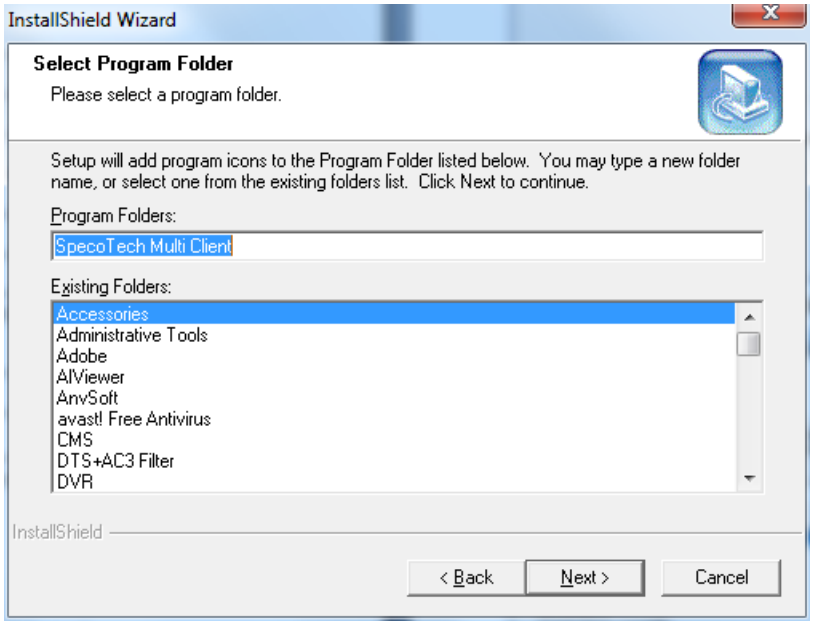
1. Insert the provided CD in the CD drive and double-click “SpecoTech Multi Client (XXXX)**.exe**”



1. Select a destination folder and click “Next”.


InstallShield Wizard
Choose Destination Location
Select folder where Setup will install files.
Setup will install SpecoTech Multi Client in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\...\Speco Technologies\SpecoTech Multi Client
Browse...
InstallShield
< Back
Next >
Cancel

2. Select the program folder and click “Next”.

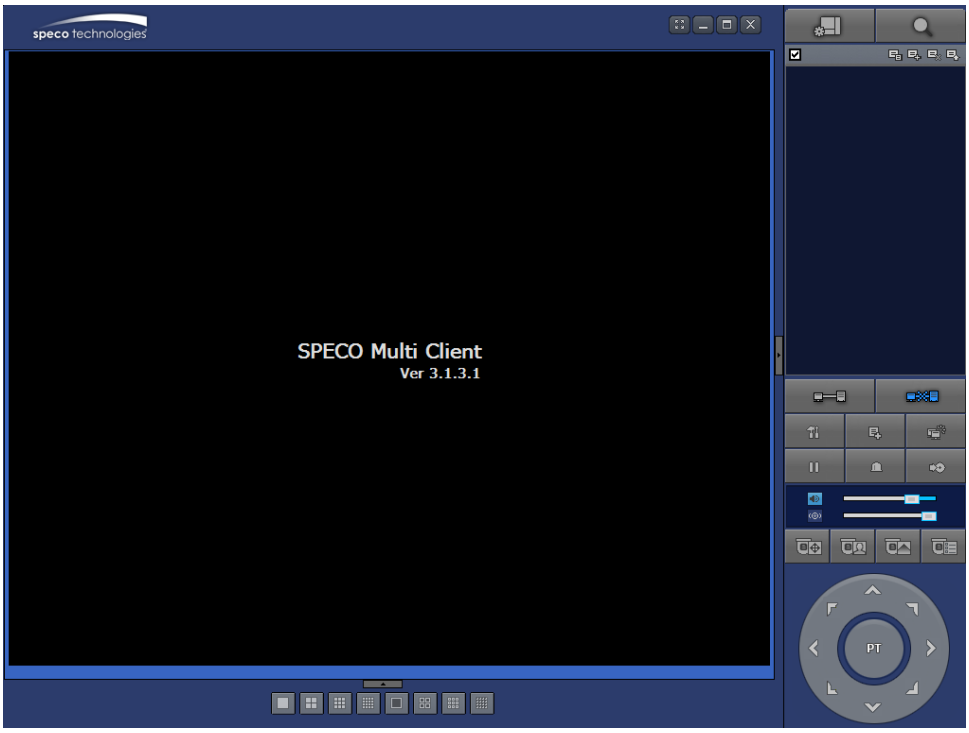


4. The installation status screen is displayed.
5. After the installation is completed, **“SpecoTech Multi Client”** icon displays on the desktop screen.

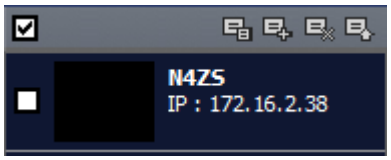
7-4. Live Window

When installation is completed, double click the **"SpecoTech Multi Client"** icon on your desktop to start the program.

7-4-1. Main User Interface



7-4-2. Control Buttons

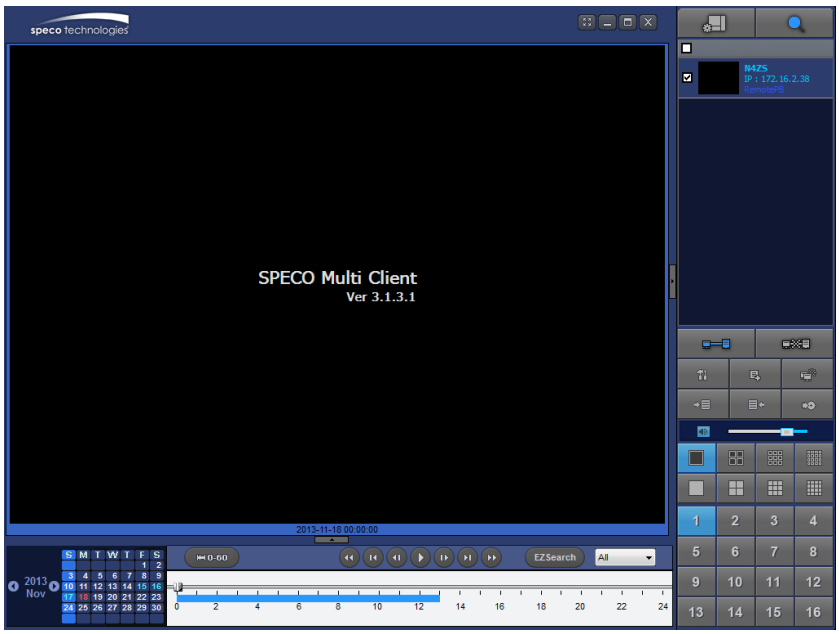
Button	Description
LOCAL PLAYBACK	Click this icon to run a playback window to search and play videos that are recorded in the local PC.
REMOTE PLAYBACK	Click this icon to run a playback window to search and play videos that are recorded in the remote ZS.
 SITE MANAGEMENT	THUMBNAIL REFRESH: Click this icon to refresh and renew thumbnail image of the connected sites. SITE ADDITION: Click this icon to open 'Site Addition' window. SITE DELETE: Click this icon to delete site from the index window, after disconnect a site. NET FINDER: Select the site from the index window and click this icon to modify the information of specific site.
CONNECT	Click this icon to connect the selected site/sites.
DISCONNECT	Click this icon to disconnect the selected site/sites.

SETUP	Click this icon to setup configuration of SpecoTech Multi Client.
CAPTURE	Click this icon to capture a still image.
EVENT LIST	Opens list of events logged by the SpecoTech Multi Client.
PAUSE	Click this icon to play/pause live video.
ALARM ON	Click this icon to turn on/off alarm outputs.
RECORD ON	Enable or disable recording of live video to local disk, which has set in setup menu.
AUDIO	Use the volume control bar to set the audio level.
MIC	Use the microphone volume control bar to set the micro phone level.
PRESET/TOUR/SCAN/MENU	User can control PRESET/TOUR/SCAN/MENU
CHANNEL SPLIT	To select the numbers of display channel/channels (Single, quad, 9 channels, and 16 channels) of highlighted site.
ZS SITE SPLIT	To select the numbers of ZS/ZSs (1 ZS, 4 ZSs, 9 ZSs, 16 ZSs) on main display screen.

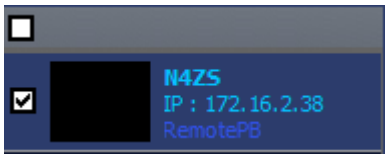
7-5. Search and Playback Window

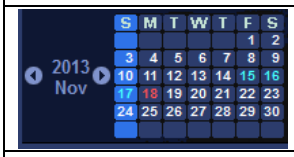
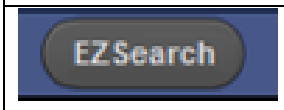
7-5-1. Main User Interface

You can access to search window by clicking the search icon (Local Playback / Remote Playback) on the upper right of the Live Window.

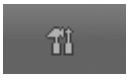


7-5-2. Main Control Panel

Button	Description
LOCAL PLAYBACK	Click this icon to run a playback window to search and play videos that are recorded in the local PC.
REMOTE PLAYBACK	Click this icon to run a playback window to search and play videos that are recorded in the remote ZS.
	THUMBNAIL REFRESH: Click this icon to refresh and renew thumbnail image of the connected sites. SITE ADDITION: Click this icon to open 'Site Addition' window. SITE DELETE: Click this icon to delete site from the index window, after disconnect a site. NET FINDER: Select the site from the index window and click this icon to modify the information of specific site.
CONNECT	Click this icon to connect the selected site/sites.
DISCONNECT	Click this icon to disconnect the selected site/sites.
SETUP	Click this icon to setup configuration of SpecoTech Multi Client.
CAPTURE	Click this icon to capture a still image.
EVENT LIST	Opens list of events logged by the SpecoTech Multi Client.
EZCopy Start	Click this icon to set the beginning time for backup of the recorded video in AVI format.
EZCopy End	Click this icon to set the ending time for backup of the recorded video in AVI format.
BACKUP	Click this icon to backup the recorded video in AVI format.
AUDIO	Use the volume control bar to set the audio level.
	To select the numbers of ZS (1 ZS, 4 ZSs, 9 ZSs, 16 ZSs) on main display screen.
	To select the numbers of display channel/channels (Single, quad, 9 channels, and 16 channels) of highlighted site.

	To select the channel to playback.
	The calendar shows dates with recorded video in color.
	To display the recorded data of selected channel or all channels on a time line scale.
	To change a timeline scale from 24 hours to 60 minutes. The timeline shows recorded data in color on the bar. You can adjust the timeline scale and move it to the time you wish to playback. Then click the play icon to display the recorded video.
	Playback buttons.
	Thumbnail search over the network. - List the thumbnail 24images from 00:00 to 23:00. - Select one of 24 images every 150sec for an hour. - Then play the tile * Click the “PREVIOUS” button to go the previous step.
	Digital Zoom Window in Live and Playback. (Only available in Single Channel Viewing)

7-6. Setup of SpecoTech Multi Client

Click the setup icon  to setup the configuration of SpecoTech Multi Client software. The SETUP window is displayed as below.

7-6-1. General

Security Option: Set a password for security options. Select security options and set a password. Then when you access any of selected functions, you need to enter the password. You can also set the save path for capturing and backup.

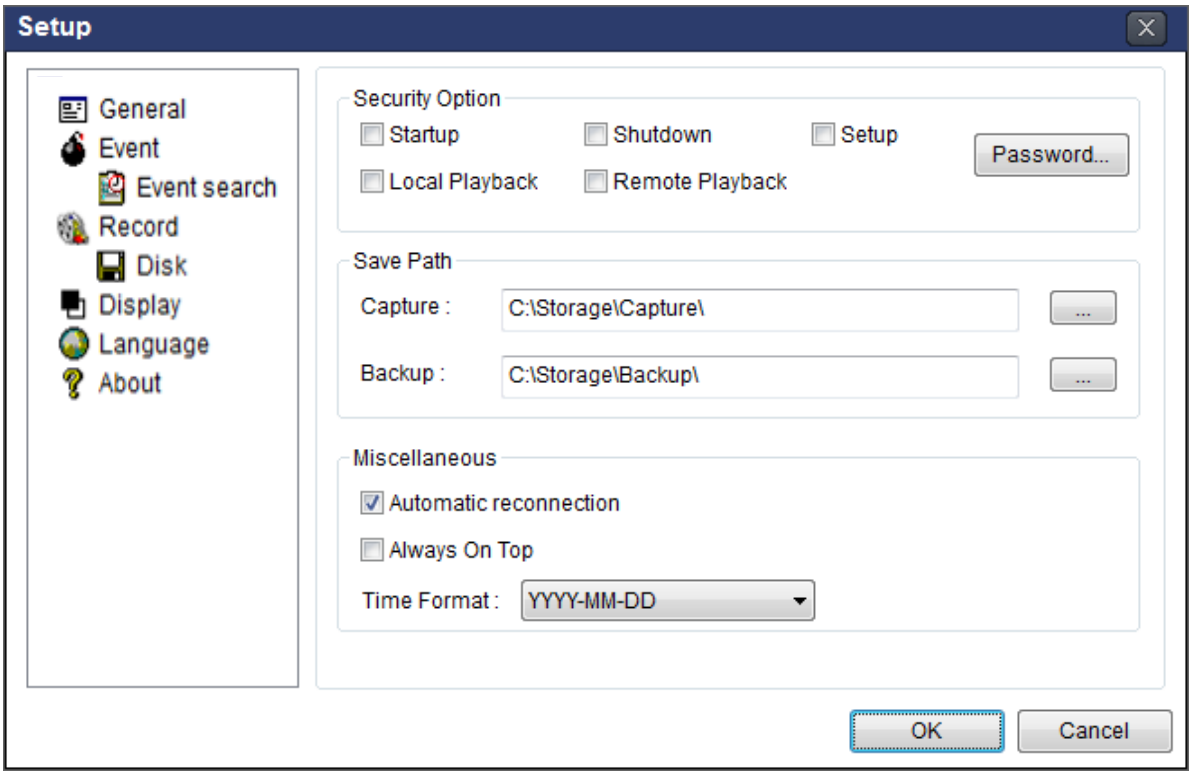
Save Path: Specify the location to save captured still image for Capture and Backup data.

Miscellaneous

Automatic Reconnection: If enabled, the software will automatically try to reconnect to the last successful IP address. But, when CLIENT ACCESS is OFF on the ZS, the software will not try to reconnect even if it is enabled.

Always On Top: If enabled, the software display will be continuously on the top of other windows.

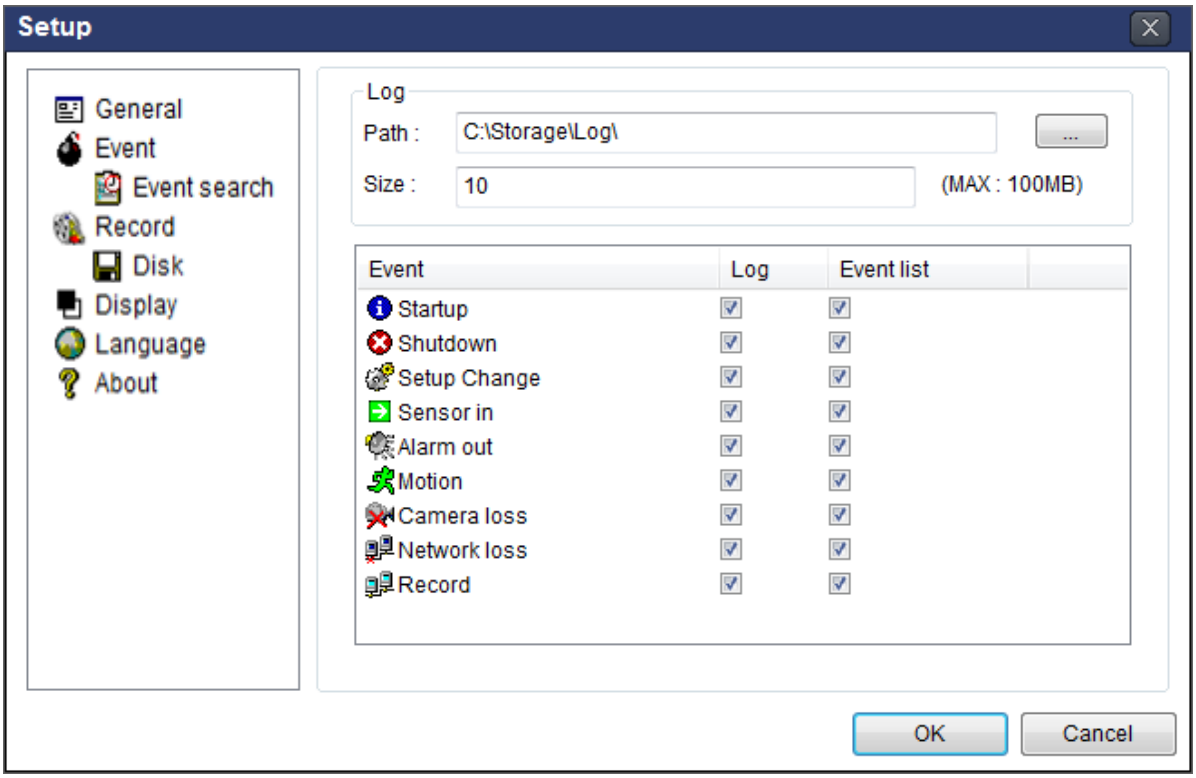
Time Format: Change the way the Client software displays the time.



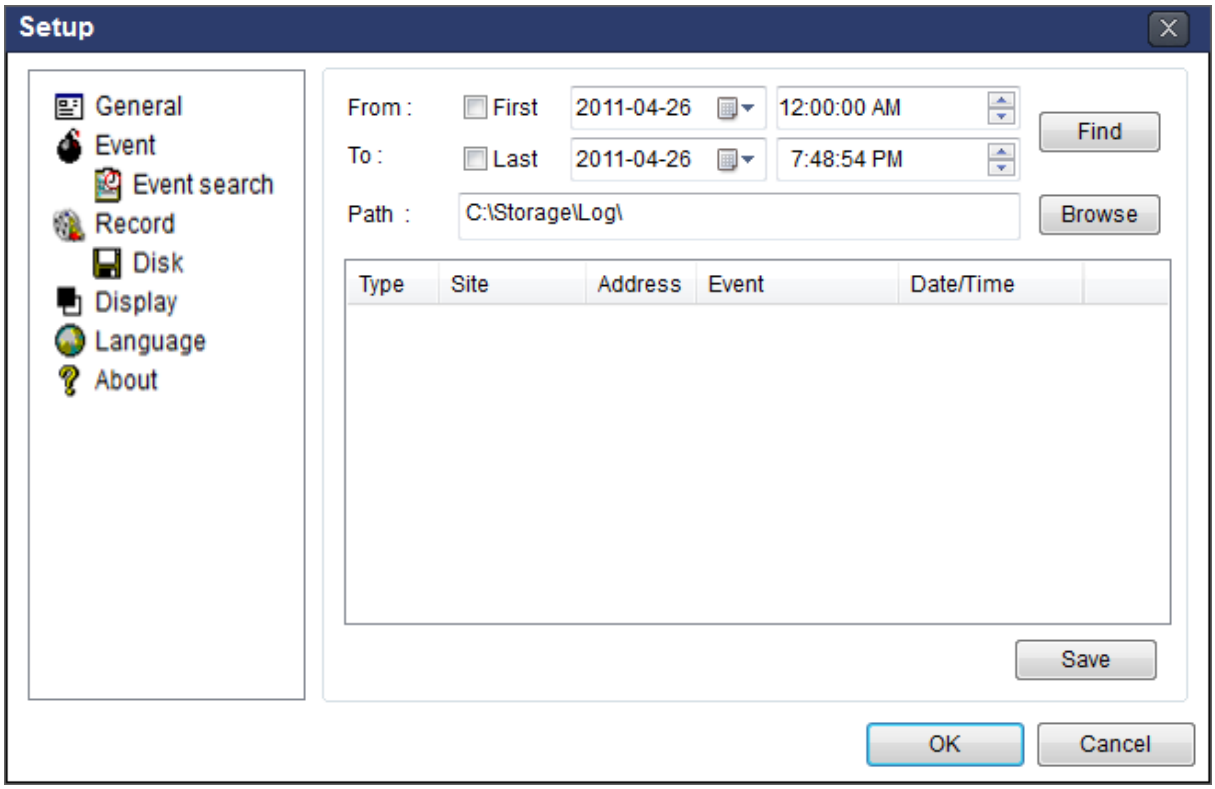
7-6-2. Event

Event log can be archived and searched.

Event Log: Specify the location to save event logs and select event to archive.

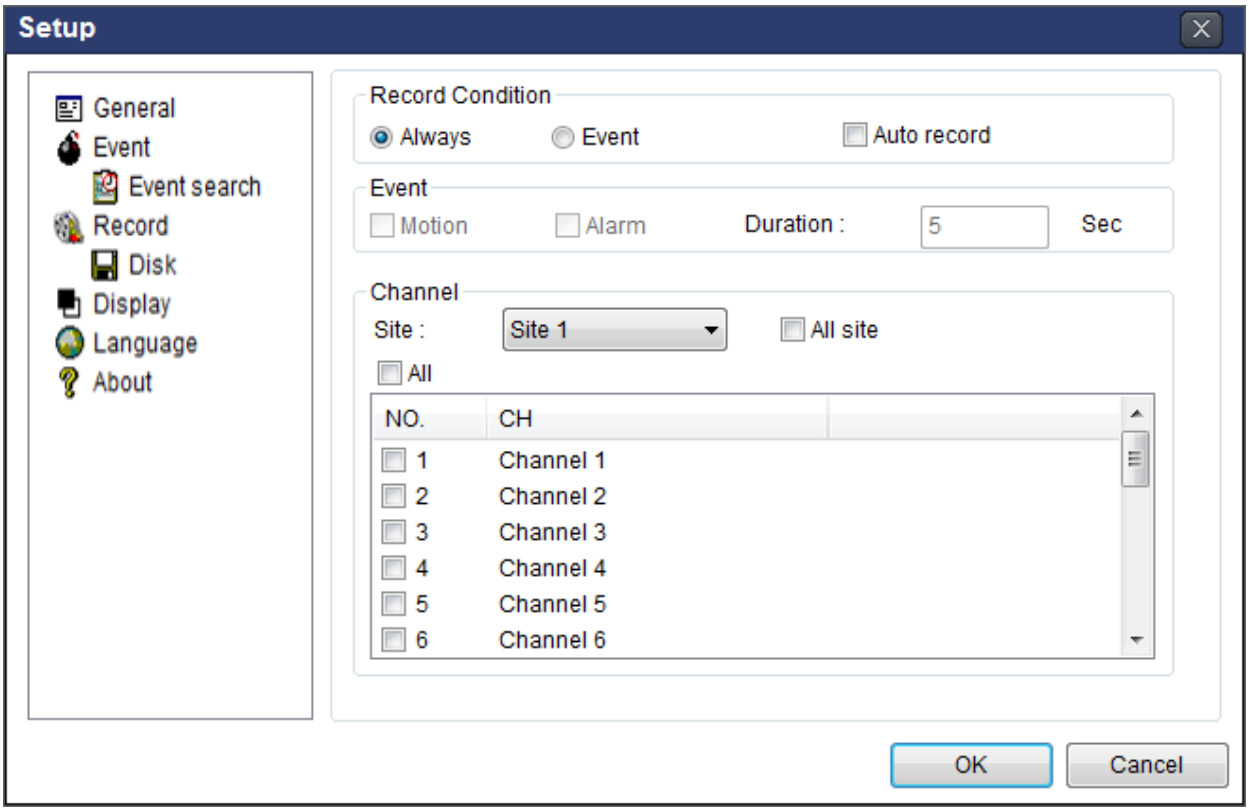


Event Search: Event log can be searched from the selected time.

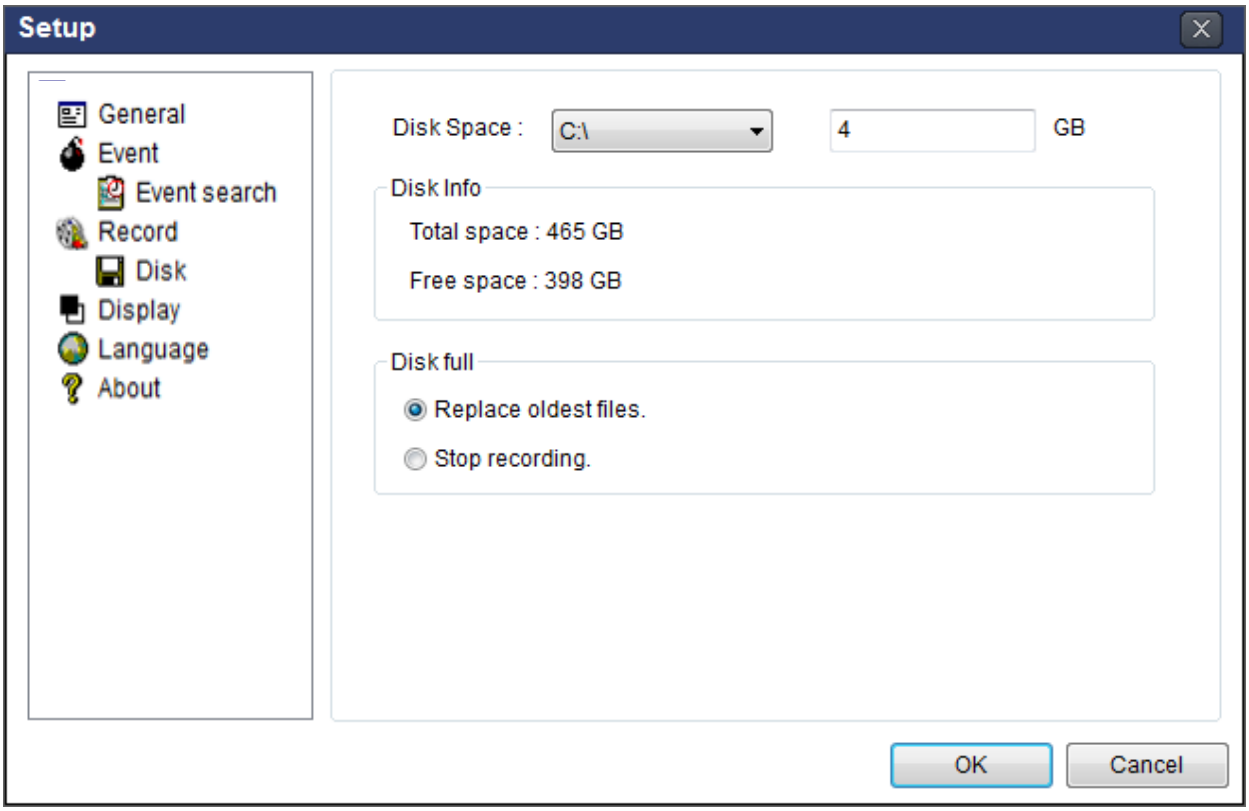


7-6-3. Record

Record Setup: You can set the recording conditions as the following; Always, Event, or Auto record. And you can also select target ZIP and channel/channels. When you set the recording condition to event, you can set event for motion or alarm with duration.

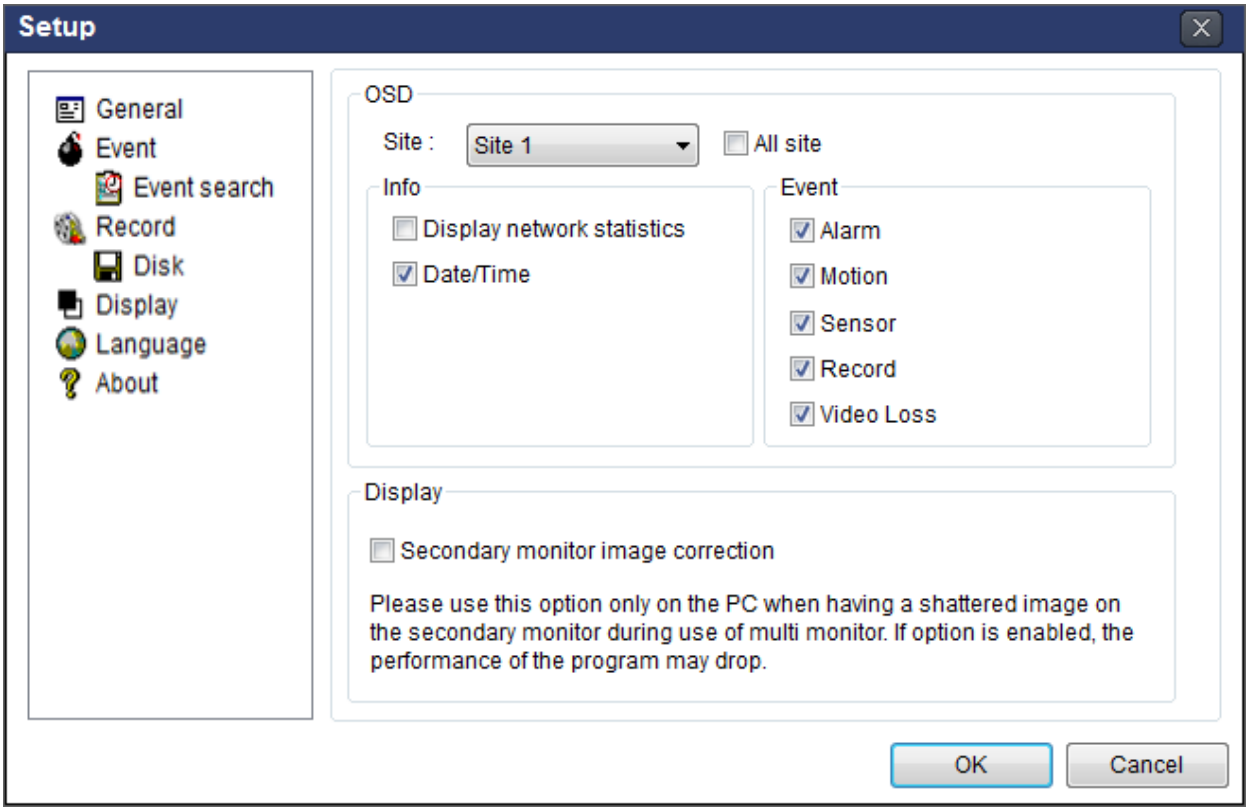


Record Local Storage Setup: You can select the local disk to record and the amount of disk space you want to allow the program to use for recording. You can also select the option to overwrite data or stop recording when the maximum amount of disk space is full.



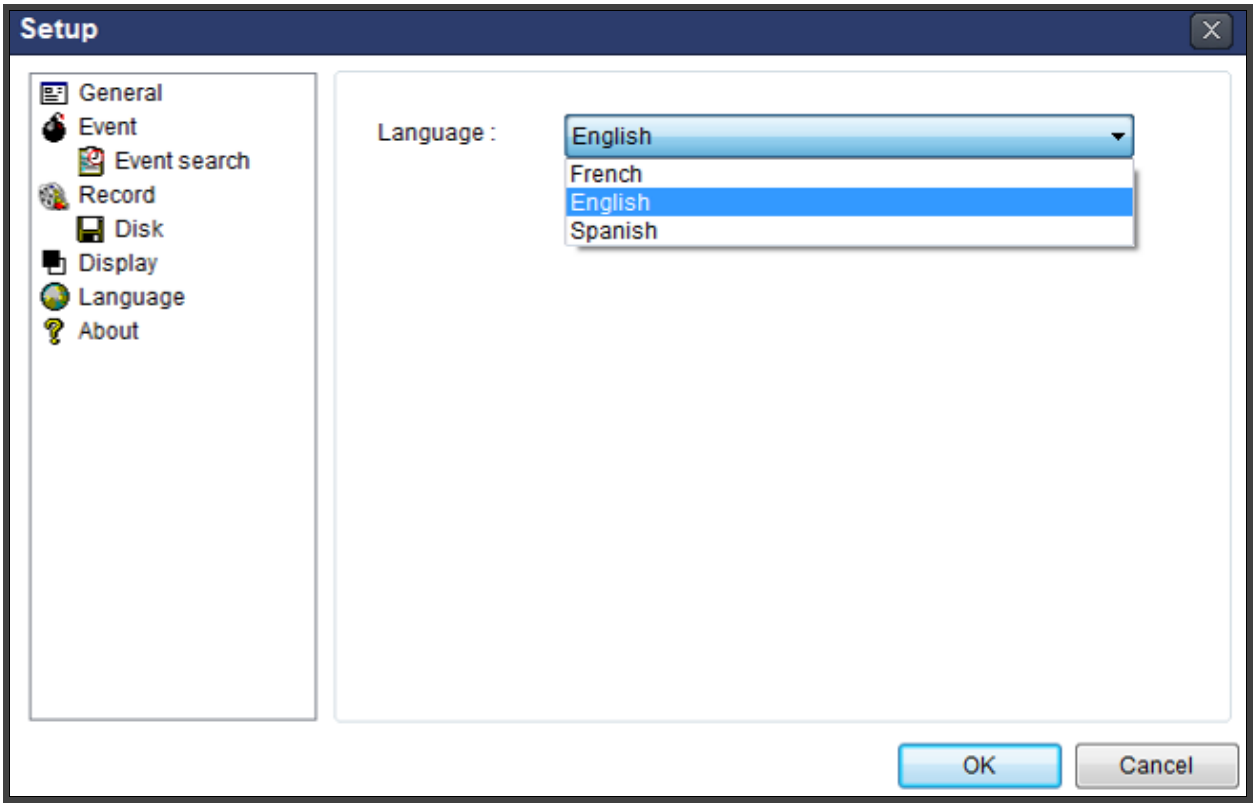
7-6-4. Display

You can select the OSD (On Screen Display) to be displayed.



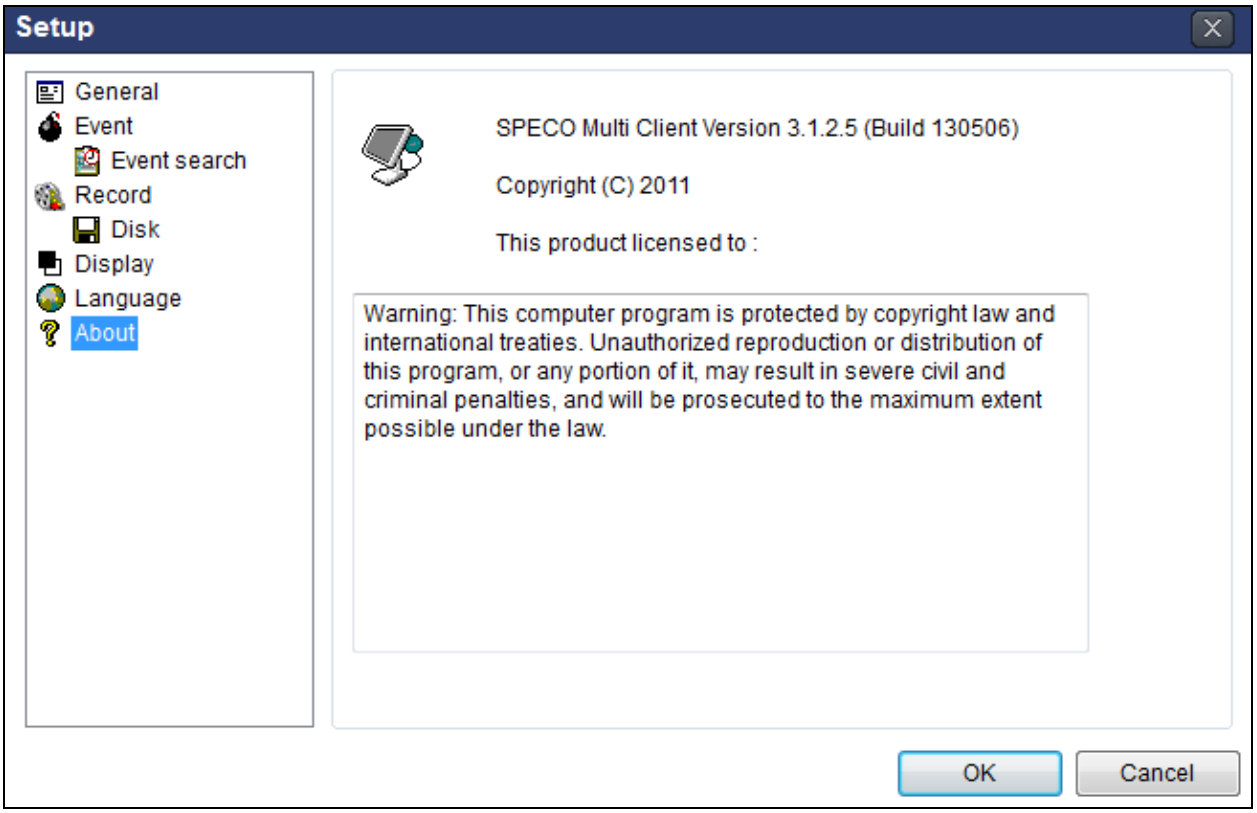
7-6-5. Language

English, French and Spanish is selectable.



7-6-6. About

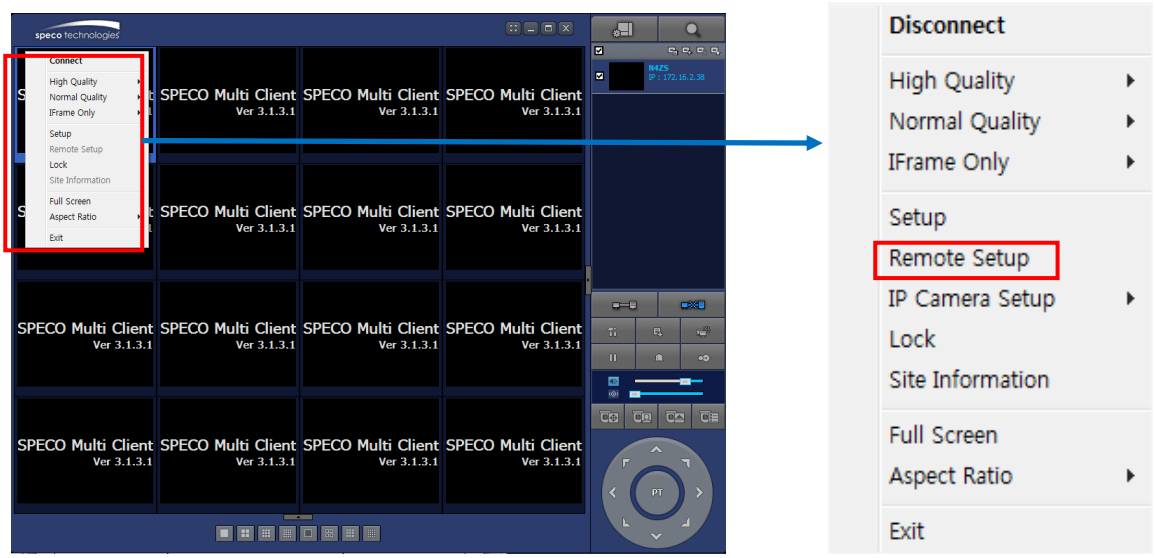
“About” provides network client version information.


Setup
General
Event
Event search
Record
Disk
Display
Language
About
SPECO Multi Client Version 3.1.2.5 (Build 130506)
Copyright (C) 2011
This product licensed to :
Warning: This computer program is protected by copyright law and international treaties. Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law.
OK
Cancel

7-7. Remote Setup

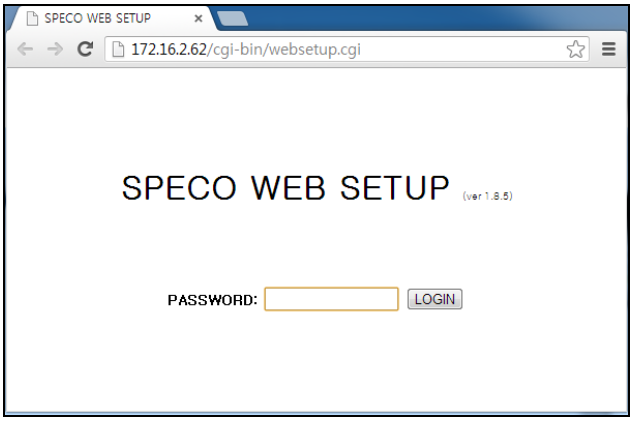
The menu settings for the ZS unit can be set over network.

Put the cursor of the mouse on the channel, which is connected to the site and right click on the mouse to open the submenu. Then the following window is displayed as below. Select the **REMOTE SETUP**.



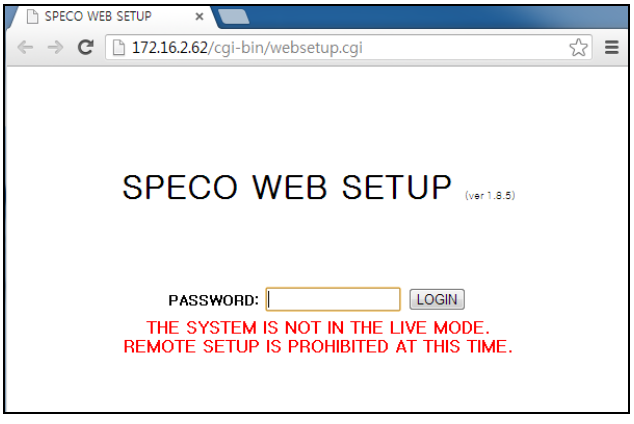
Then the setup window is displayed. The specified menu screen is displayed on the upper left of the screen. Enter the password of the ZS when prompted. (NOTE: The default password is 1111)

Setting is the same as with the ZS menu setting. Refer to the corresponding pages for details on the setting items.



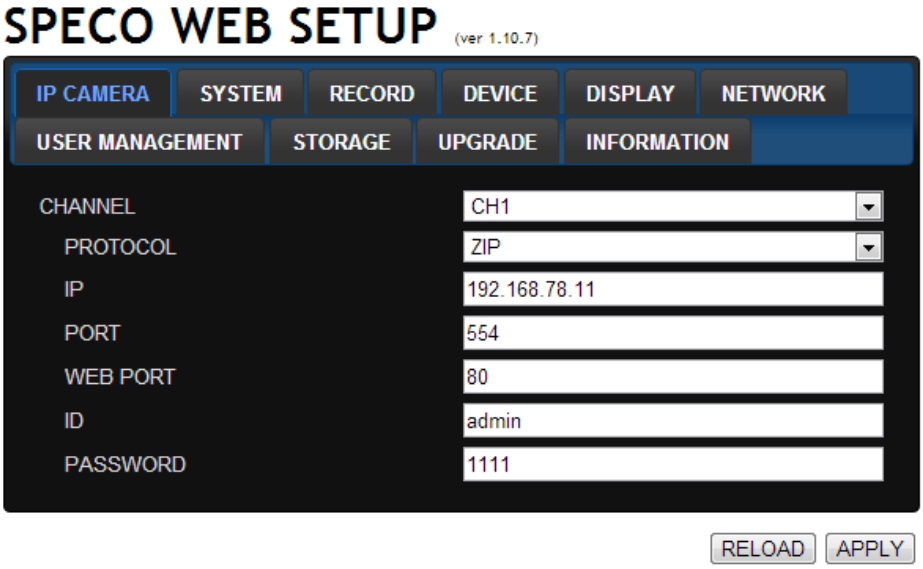
NOTICE

Web Setup is prohibited when ZS is in local Setup Menu.



7-7-1. IP Camera

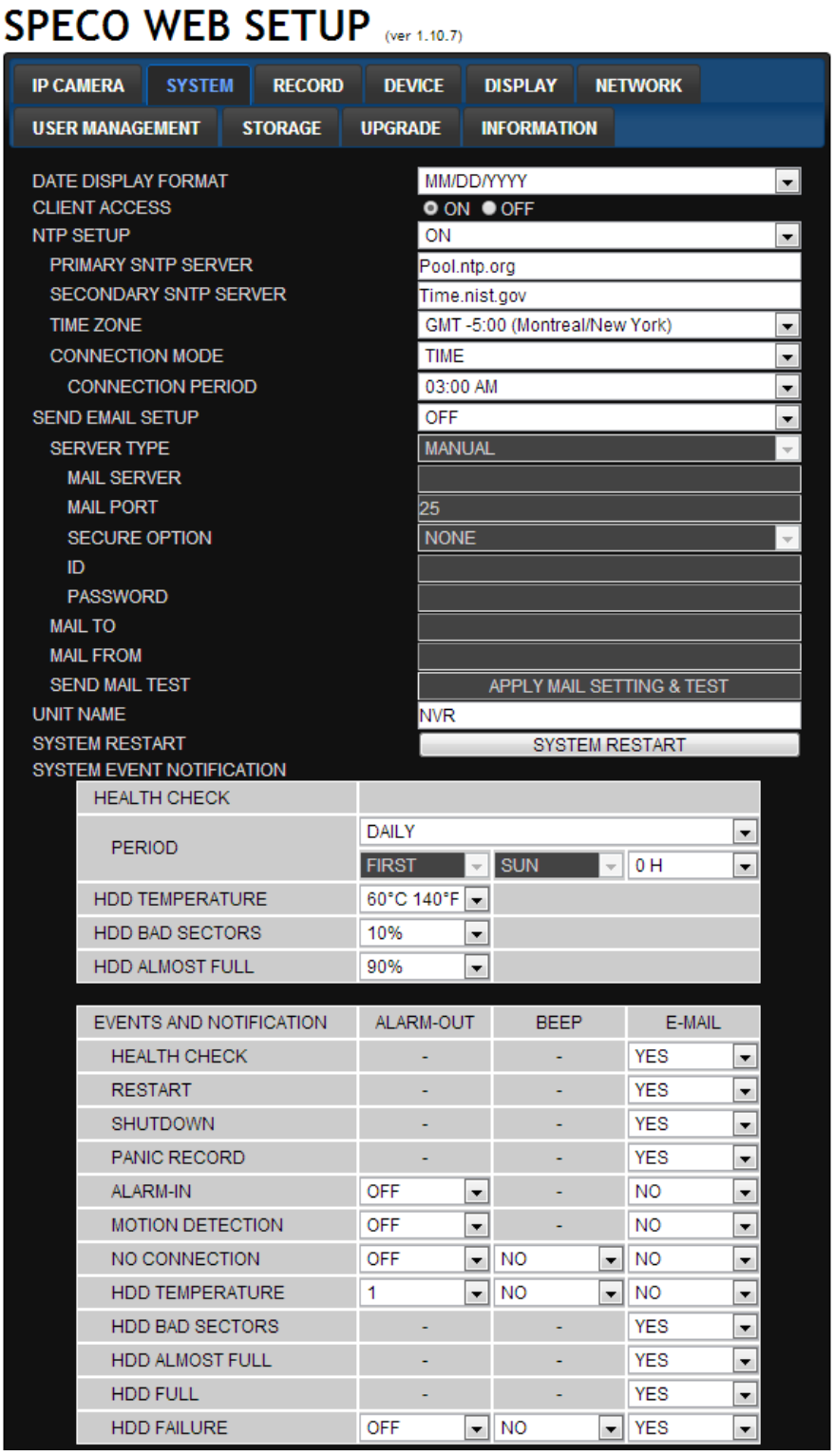
Select **IP Camera** to set system and time settings



- **CHANNEL:** Select the Channel to setup an IP Camera.
  - **Protocol** : Select the Brand of the IP Camera
  - **IP** : Enter the IP Address of the desired Camera
  - **Port** : Enter the Camera stream Port Number (default : 554).
  - **Web Port**: Enter the Camera Web Port Number (default : 80).
  - **ID** : Enter the User ID for access to the IP Camera
  - **PASSWORD** : Enter the Password for the associated ID

7-7-2. System

Select **System** to set system and time settings.



- **DATE DISPLAY FORMAT:** Select the date display format.
- **CLIENT ACCCESS:** Enable/Disable remote access through network client software.
- **NTP SETUP:** Sets whether to synchronize the time using NTP server or not.
    - **Primary SNTP Server**: Input the NTP primary server address.
    - **Secondary SNTP Server**: Input the NTP secondary server address.
    - **Time Zone**: Select the time zone.
    - **Connection Mode**: Select the connection mode to NTP time server.

- **SEND E-Mail SETUP**: Sets whether to enable/disable e-mail sending function.
    - **SEVER TYPE:** Select GMAIL, HOTMAIL, AOL, YAHOO or MANUAL)
    - **MAIL SERVER:** Input the SMTP server name as well as the user ID and password.
    - **MAIL PORT:** Mail port setting.
    - **SEURE OPTION:** Select a secure mail server connection. **(SSL or TLS)**
    - **ID :** Email User ID
    - **PASSWORD :** Email User Password
    - **MAIL TO:** Input the appropriate email address to enable sending e-mail reports
    - **MAIL FROM (Return Mail Address)**: Set the source e-mail address to be notified to the destination.
- **SEND MAIL TEST** : E-mail settings sent a test mail to the registered account
- **UNIT NAME**: Name the ZS
- **SYSTEM RESTART :** Restart the system
- **SYSTEM EVENT NOTIFICATION**

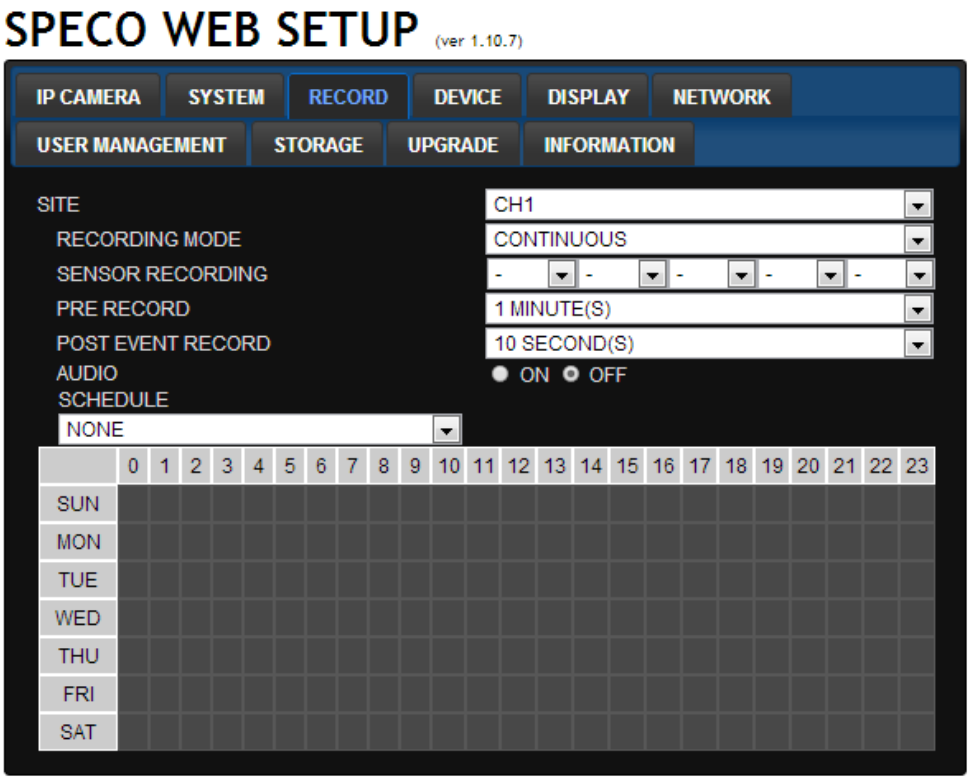
  Allows the user to set EVENT NOFICIATION ON or OFF
    - **HEALTH CHECK**

      (Allows the user to set MAIL STATUS periodically) : DAILY or WEELY or MONTHLY
    - **HDD TEMPERATURE**
    - **HDD BAD SECTOR**
    - **HDD ALMOST FULL**
    - HEALTH CHECK / RESTART / SHUTDOWN / PANIC RECORD

      Enable Email Notification in the event a problem occurs with the ZS.
    - ALARM-IN : Enable Email Notification when the camera detects sensor
    - MOTION DETECTION : Enable Email Notification when the camera detects motion
    - NO CONNECTION : Enable Email Beep and Alarm output Notification when the camera signal is lost.
    - HDD TEMPERATURE : Enable Email Beep and Alarm output Notification when the HDD reaches the maximum temperature
    - HDD BAD SECTOR : Enable Email Notification when the HDD has bad sectors.
    - HDD ALMOST FULL : Enable Email Notification when the HDD is almost full.
    - HDD FULL : Enable Email Notification when the HDD is full.
    - HDD FAILURE : Enable Email, Beep and Alarm output Notification when the HDD fails.

7-7-3. Record

Select **RECORD** tab to set the recording conditions.

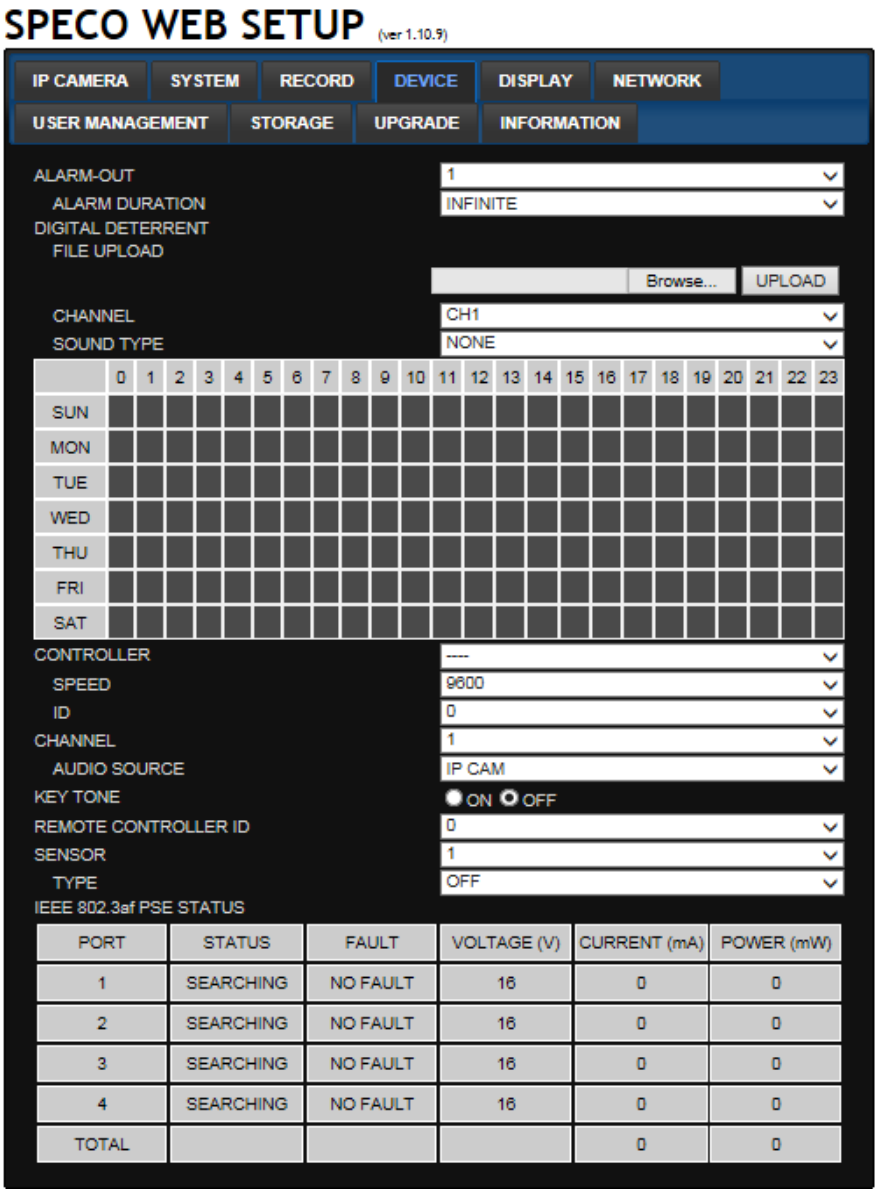


These settings apply to the specified channel only.

- Recording Setup
  - **RECORDING MODE:** CONTINUOUS, MOTION, SENSOR, SCHEDULE
  - **PRE RECORD**: Sets whether to perform or not pre recording.
  - **POST EVENT RECORD**: Sets the duration of the event recording.
  - **AUDIO**: Sets audio recording ON or OFF.
  - **SCHEDULE**: Sets the schedule recording.

7-7-4. Device

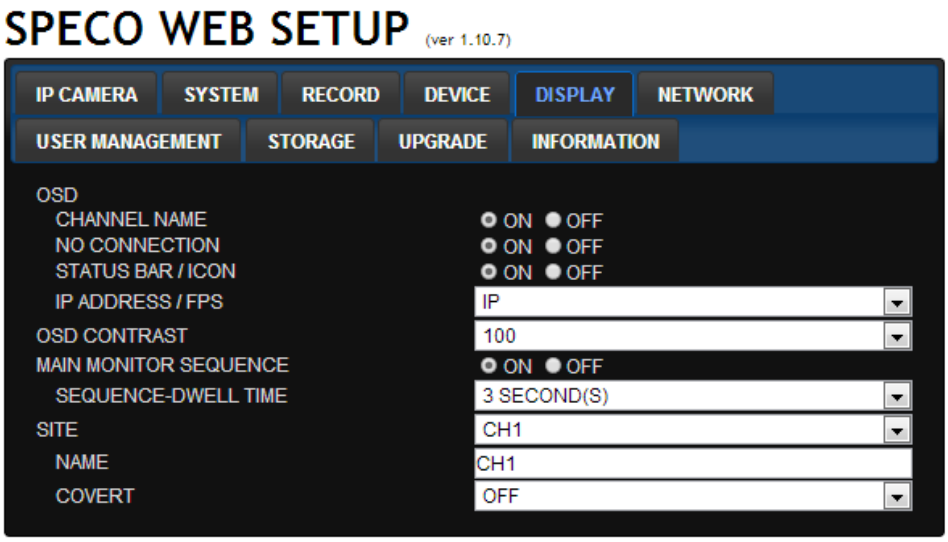
Select **Device** to set device settings of the ZS



- **ALARM OUT:** Set the sensor, motion, and video loss for triggering alarm relay.
  HDD Error and Video Loss can be set for triggering a beeping sound
  The following settings can be changed to trigger an alarm output.
  - **ALARM DURATION**
- **DIGITAL DETERRENT:** The schedule of digital deterrent can be set and a sound file can be uploaded to the ZS.
  To set up schedule, select **CHANNEL >** select **SOUND TYPE >** select Area.
- **CONTROLLER:** Set the controller speed, type and ID.
- **CHANNEL:** Select the Channel to configure audio input
  - **AUDIO SOURCE:** Local Audio (RCA) or IP CAM Audio
- **KEYTONE**: Sets On or Off of Key Tone.
- **REMOTE CONTROLLER ID**: Sets an ID number of which remote control to receive commands.
- **SENSOR:** Select the type of sensor.
- **IEEE 802.3af POE Status**: a table showing the status of all POE devices connected to the ZS.

7-7-5. Display

Select the **DISPLAY** tab to set the DISPLAY conditions.



These settings apply to all channels.

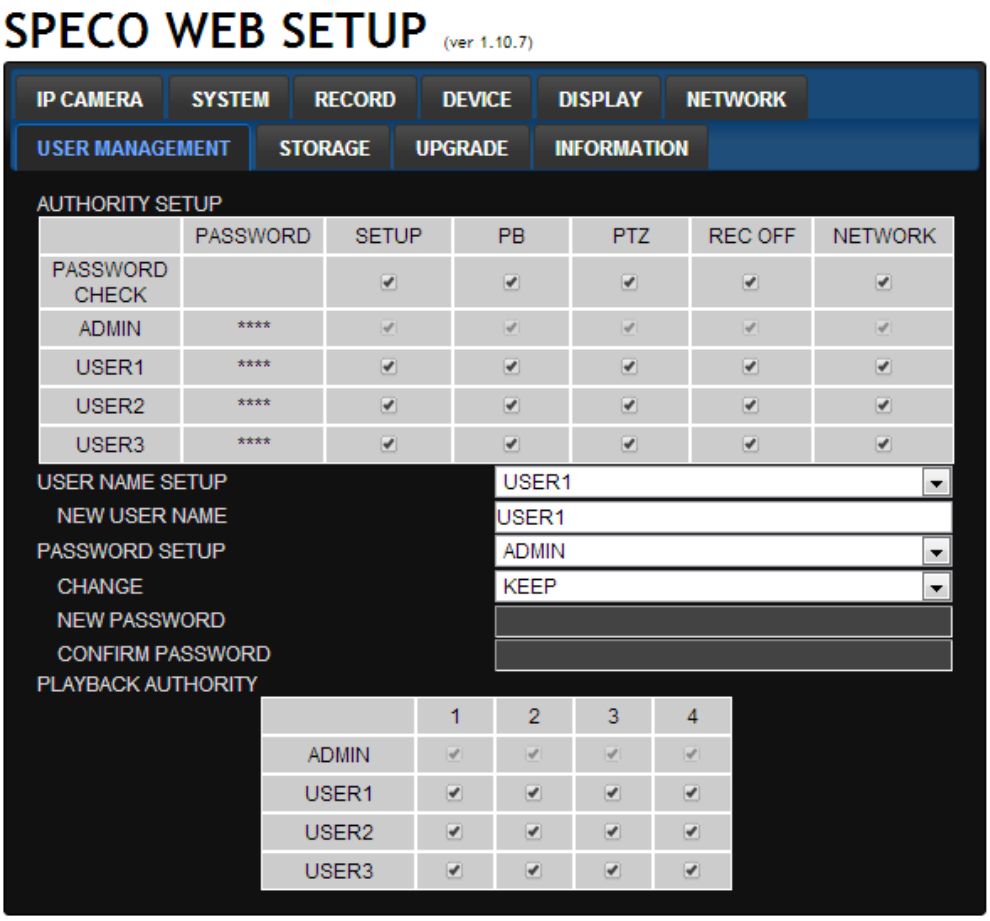
- **OSD**: Sets whether to display or not date and time as well as channel number on the screen.
- **OSD CONTRAST**: Adjust the character contrast on the screen.
- **MAIN MONITOR SEQUENCE**: Setting for automatically switching the displayed video.
- **SEQUENCE DWELL TIME**: Sets the interval for automatically switching the screens.
- **SITE**: Name, Covert, These settings apply to the specified channel only.

7-7-6. Network

- **NETWORK TYPE (*Cannot be altered remotely*)**
  - **STATIC**: The address setting mode is manual. Input IP, Gateway, Subnet Mask, and DNS IP.
  - **DHCP**: The address setting mode is automatic.
- **DDNS**: Set whether to use DDNS service or not
  - **HOST NAME: A**llows the user to setup a domain name manually
  - **SUMBIT/UPDATE:** Select ON to submit the settings
  - **ezDDNS:** Enable ezDDNS to register the host name automatically
- **NETWORK PORT:** When connecting multiple ZSs to the network, set a unique port number.
- **NETWORK AUDIO PORT:** Display the network audio port (NETWORK PORT + 1).
- **WEB PORT**: Set a web server port number.
- **WIRELESS LAN** : Wireless networks can be configured(option)
  - **IP ADDRESS:** Wireless IP Address
  - **SSID(Sevice set identifier):** Wireless Network ID
  - **KEY(8~15 Characters):** Wireless Network Password

7-7-7. User Management

Select the **USER MANAGEMENT** tab to set the DISPLAY conditions.



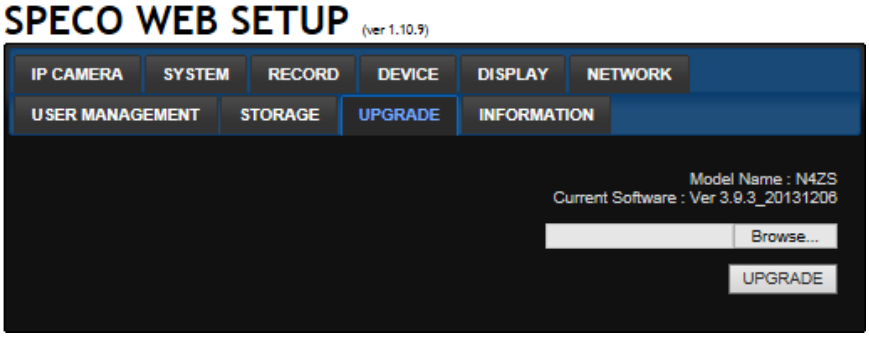
- **AUTHORITY SETUP**: Select which users have access to each function, password check can be implemented for each function accessed.
- **USER NAME SETUP**: Select which Username to change
  - **NEW USER NAME:** Input the new username
- **PASSWORD SETUP**: Select Username to change Password
  - **CHANGE:** Select whether to KEEP or CHANGE the current password.
  - **NEW PASSWORD:** Input NEW Password if CHANGE was selected.
  - **CONFIRM PASSWORD:** Input NEW Password again to confirm.
- **PLAYBACK AUTHORITY**: User can select which users have access to which channels.

7-7-8. Storage

Select **Storage** to configure recording settings such as overwriting the hard disk and the setting a storage period for the recording data.

- **OVERWRITE**: Select on to continue recording by overwriting when the hard disk becomes full.
- **DISK INFO** : Hard drive information.
- **RECORD LIMIT**: Sets whether to limit or not the recording data storage period.

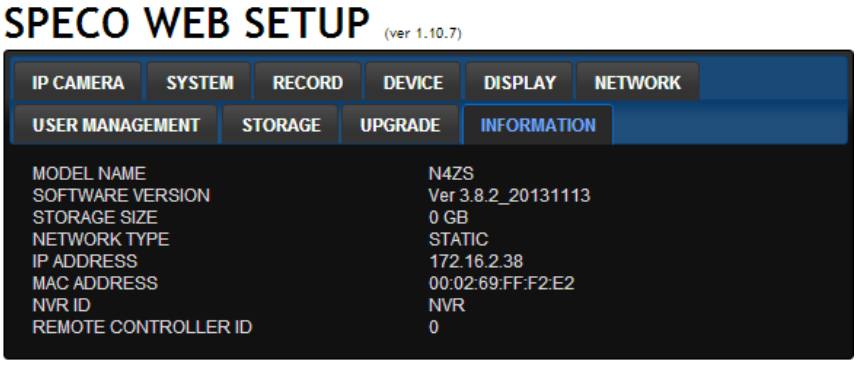
7-7-9. Remote Upgrade



Shows the current Firmware version installed on ZS.

- **Browse:** Select BROWSE to locate the firmware file.
- **Upgrade:** Select UPGRADE to upgrade the firmware of the ZS.

7-7-10. Information



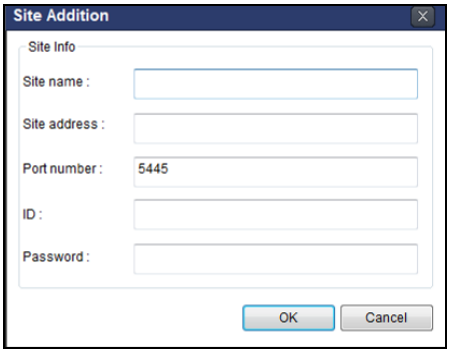
Displays general information about the ZS.

7-8. Operation via SpecoTech Multi-Client Viewer Software

7-8-1. Addition, Delete, and Modify ZS Sites

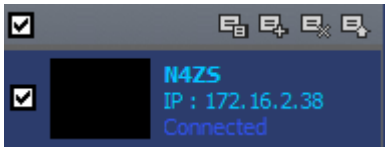
7-8-1-1. Addition of Sites

1. Click SITE ADDITION button. And then the following window will be displayed as below.



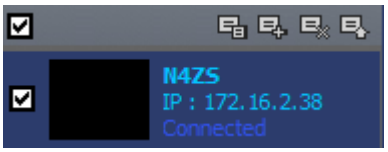
- **Site Name:** Input a name that properly describes a site.
- **IP Address:** Input IP address (Public IP address of a router that ZS is connected.) or Domain name
- **Port Number: Default Port Number is "5445".**
- **ID:** Input ID of ZS. **Default ID is "admin".**
- **Password:** Input network password of ZS. **Default Password is "1111".**

2. Click OK button. And then the registered site is added on the directory window.



7-8-1-2. Deleting a Site

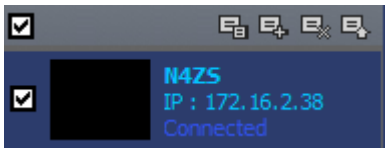
1. Select the site/sites to delete from the directory window.



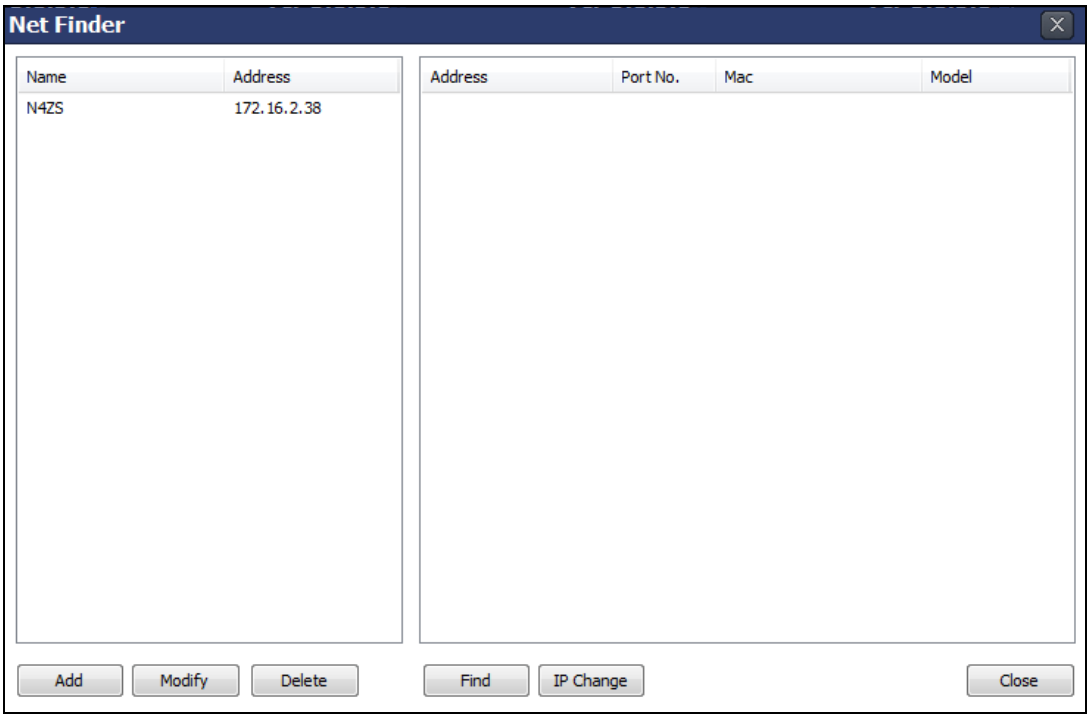
2. Click SITE DELETE button. And then the selected site/sites is/are deleted.

7-8-1-3. Modify Sites

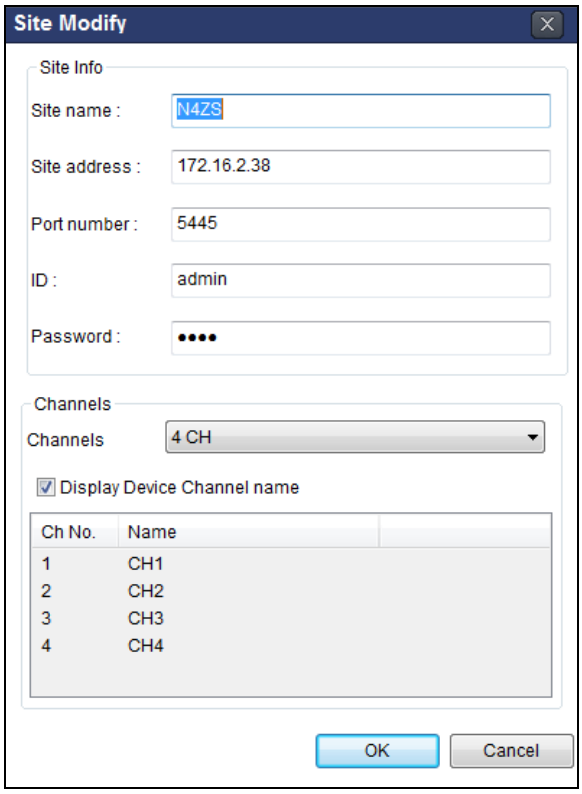
1. Select the site/sites to modify from the directory window.



2. Click NET FINDER button. And then the following window will be displayed as below.



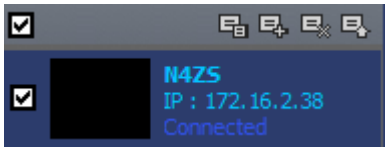
3. Click MODIFY button and then the modified information is displayed as below.



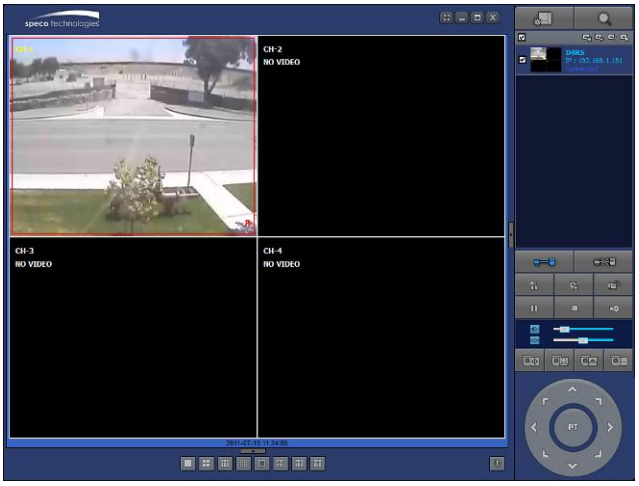
7-8-2. Connect and Disconnect

7-8-2-1. Connect

1. Select site/sites to connect from the directory window.

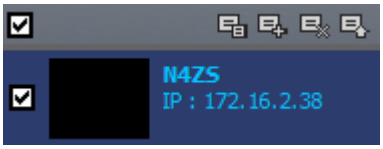


2. Click CONNECT button, and then site/sites displays/display as connected.



7-8-2-2. Disconnect

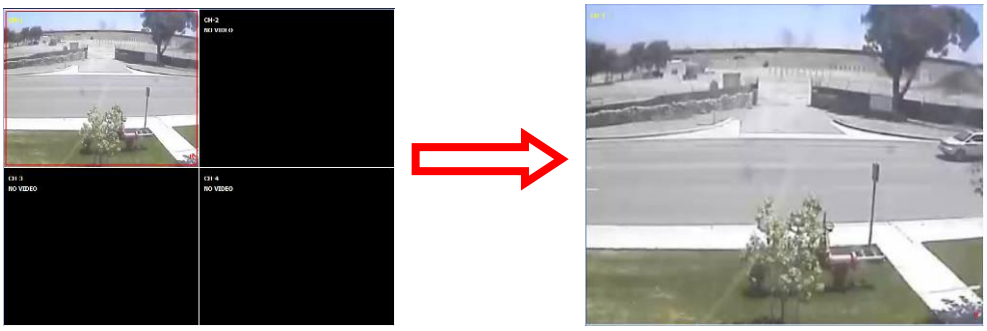
1. Select site/sites to disconnect from the directory window.



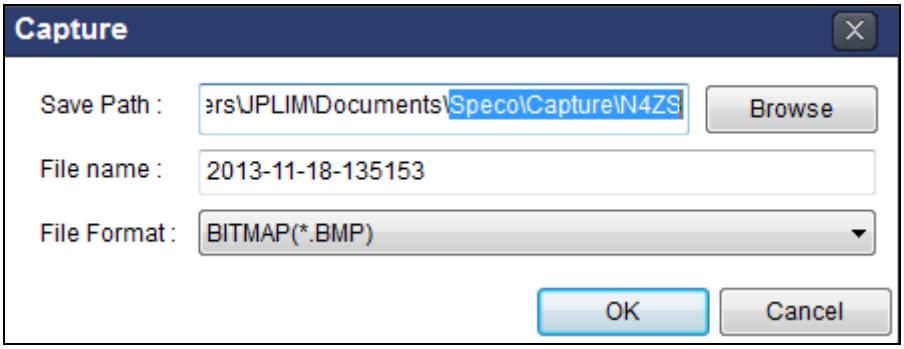
2. Click DISCONNECT button, and then selected site/sites disconnected.

7-8-3. Still-Image Capture During Live

1. Double-click a channel to capture from the display screen. (Otherwise all channels will be captured.).



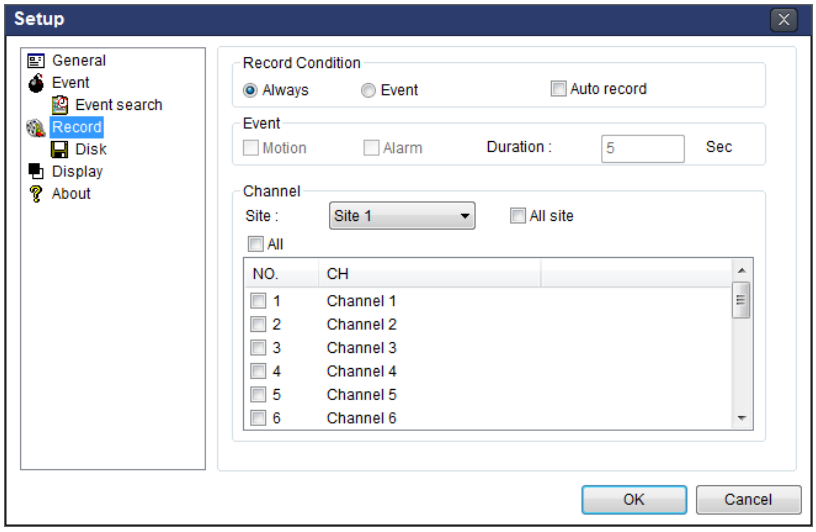
2. Click CAPTURE button. And then the Capture window will be displayed as below.



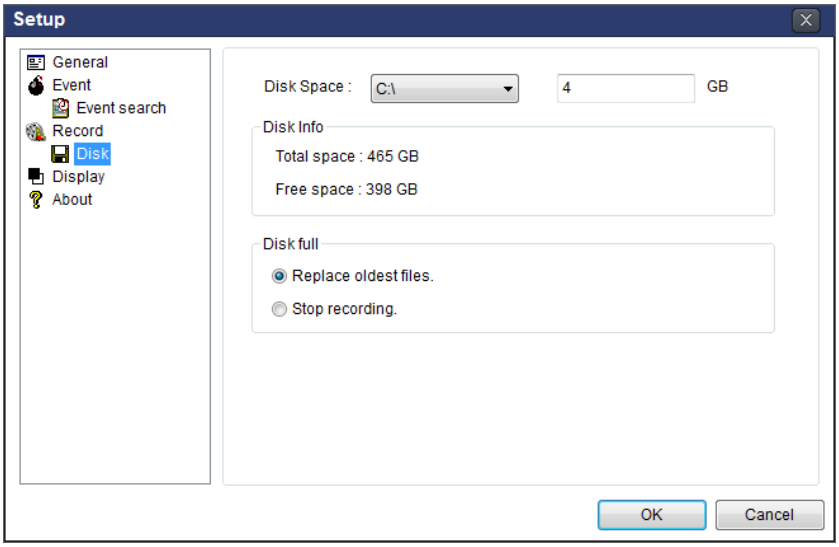
3. Set Save Path, File Name, and File Format. And then click OK button.
4. Still image is saved as set in Capture window.

7-8-4. Recording Video on Local PC During Live

1. Click SETUP button and then a setup window will be displayed as below.
2. Select Record and set the values.

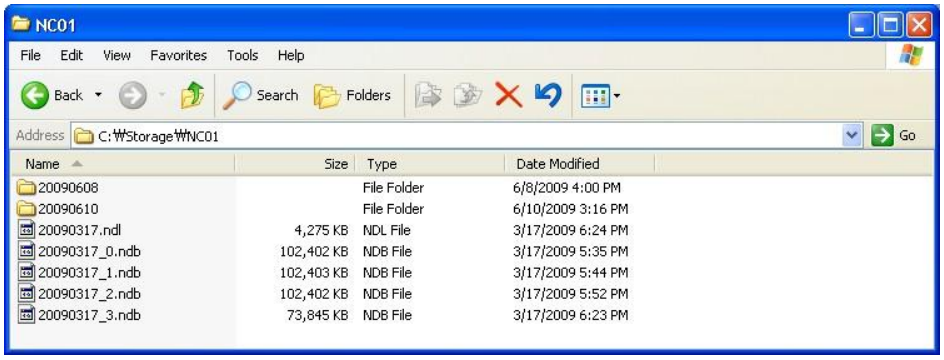


3. Select Disk and set the values.



4. Click RECORD ON button. And the color of button is changed.

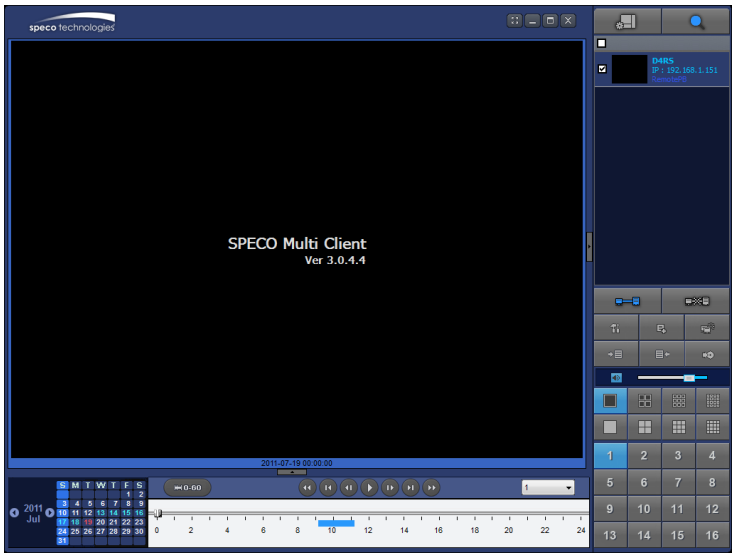
5. Live video data is recorded as set in Record and Disk setup. These video data can be searched and play-backed with Local Playback.



7-8-5. Local Playback and Remote Playback

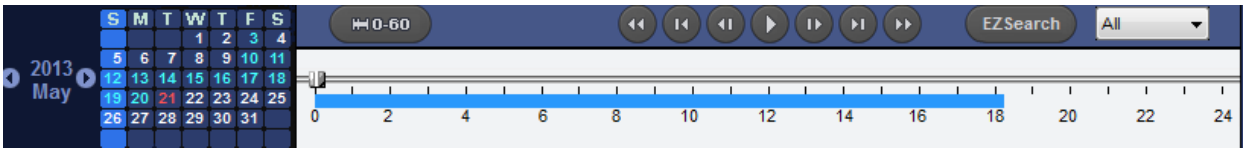
7-8-5-1. Playback of Recorded Video on a Local PC

1. Click LOCAL PLAYBACK. And then Playback Window will be displayed over the Live Window.

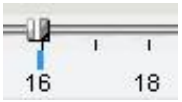


2. Select site/sites to connect from the directory window.

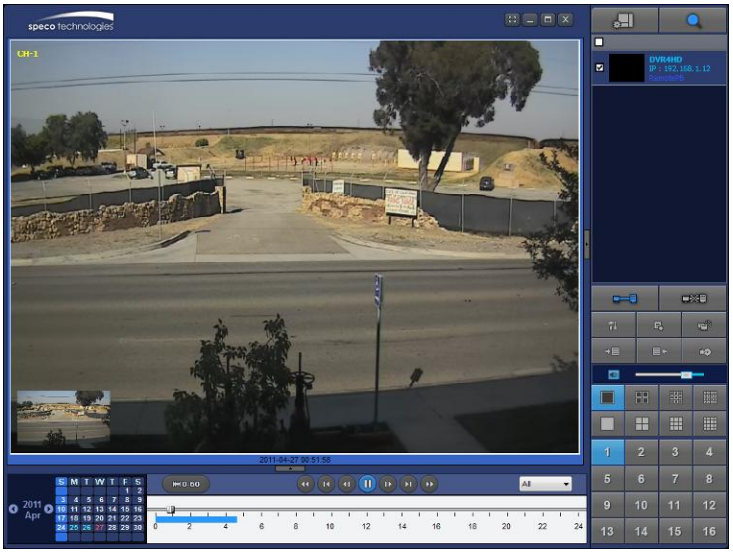
3. Click CONNECT button. And then Green bar displays on Search calendar and timeline scale window.



6. Move the marker on the timeline scale to where there is video data and press the PLAY button.



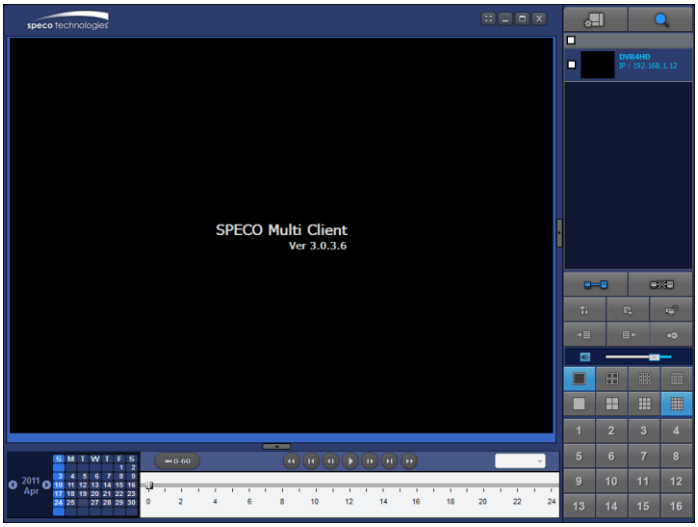
7. Video data that is recorded on local PC will be played-back.



8. Use the mouse scroll to digitally zoom in and out from a single channel display.

7-8-5-2. Playback of Recorded Video on Remote ZS

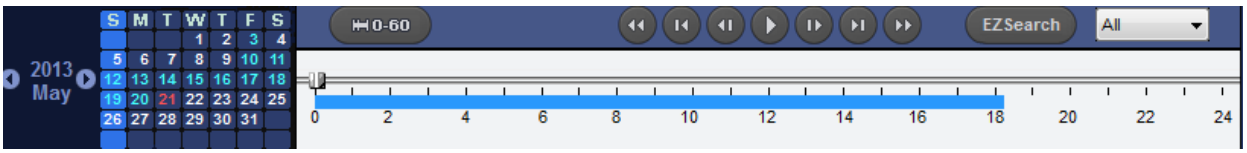
1. Click REMOTE PLAYBACK. And then Playback Window will be displayed over the Live Window.



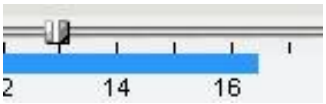
2. Select the site to connect from the directory window.

3. Click Connect.

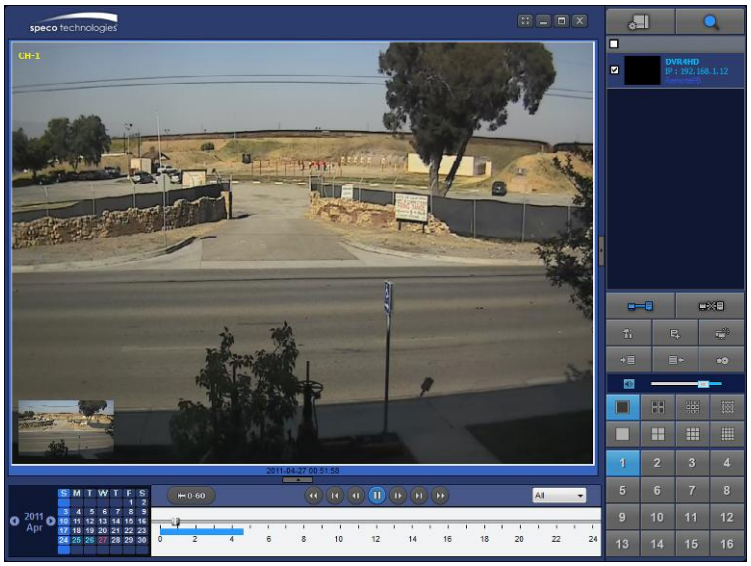
And then Green bar displays on Search calendar and timeline scale window.



4. Move the marker on the timeline scale to where there is video data and press the PLAY button.



5. Video data that is recorded on the remote ZS is played-back.

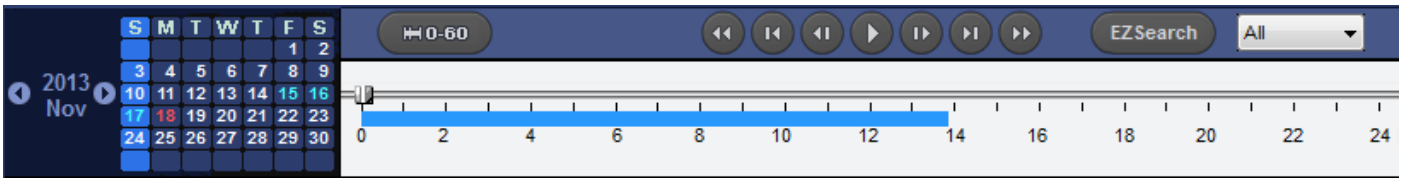


7-8-6. AVI Backup during Playback

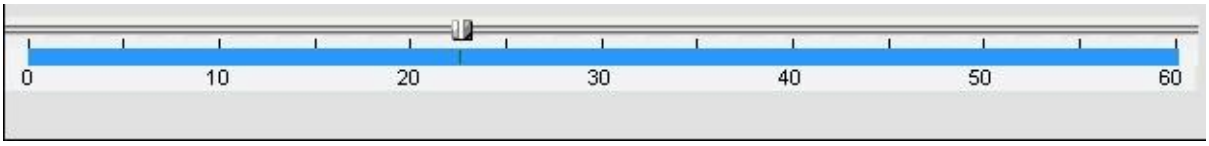
You can back up the recorded videos in AVI format during playback.

1. Double-click the target channel to backup.

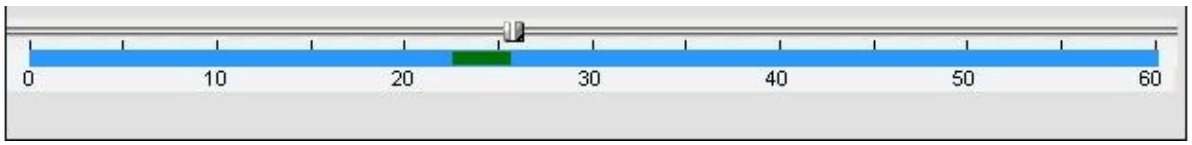
2. Select the beginning time by using the search calendar and timeline scale bar.



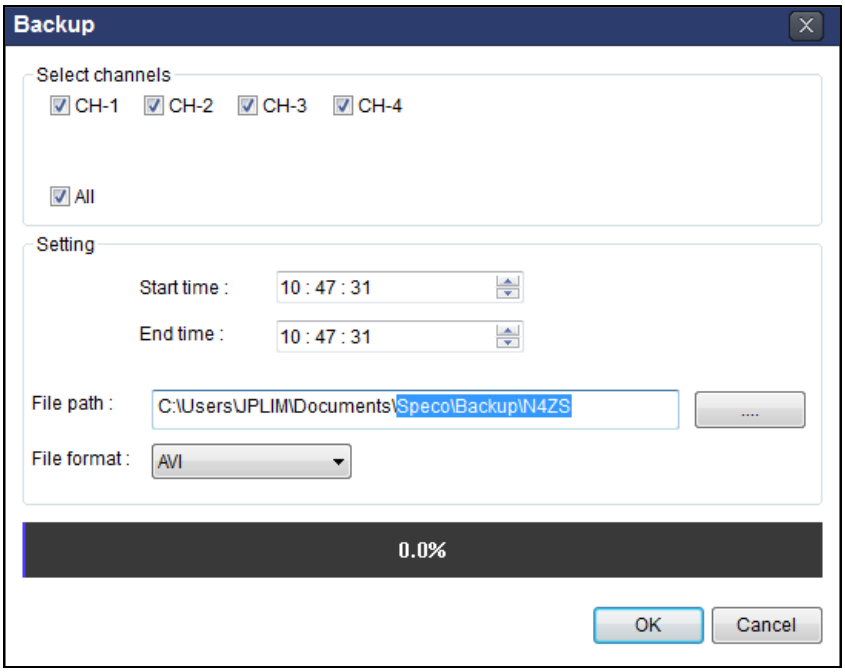
3. Click EZCOPY START button on the timeline scale to select the beginning point of the backup.



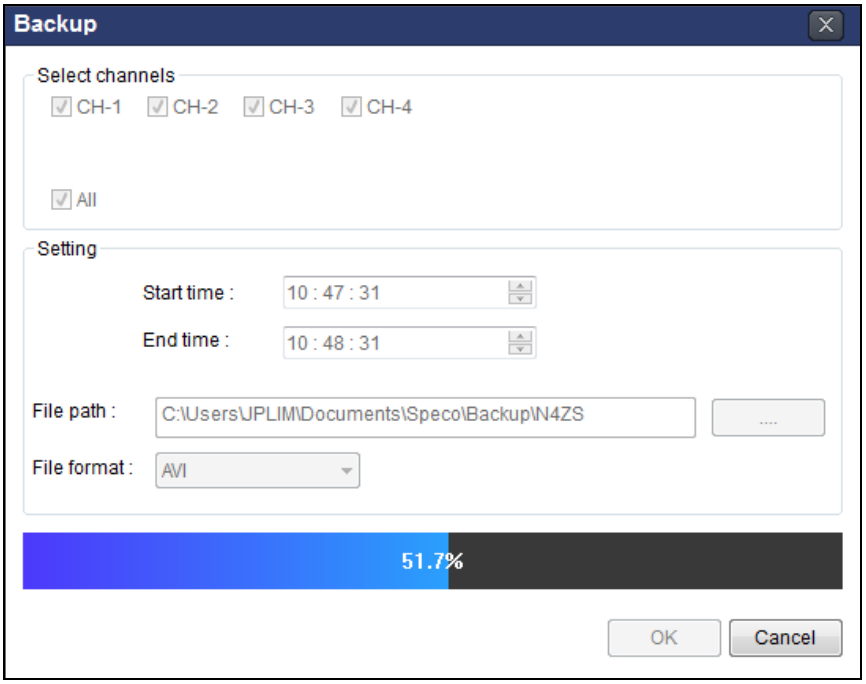
4. Click EZCOPY END button on the timeline scale to select the ending point of the backup. Then, the selected starting point and the ending point on the timeline scale bar will be marked in green.



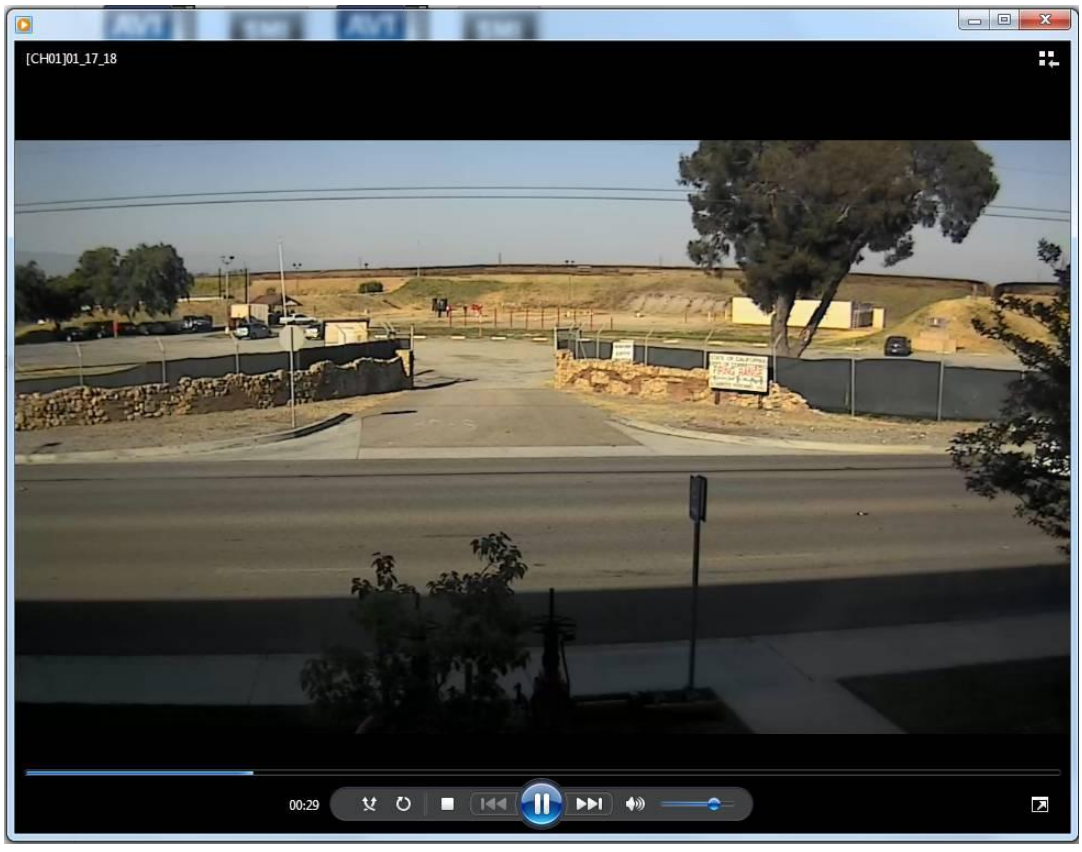
5. Click BACKUP. And then the BACKUP window will be displayed as below.



6. You can also set the beginning time and ending time on this window. After selecting a channel for backup, click the OK button. The backup will begin.

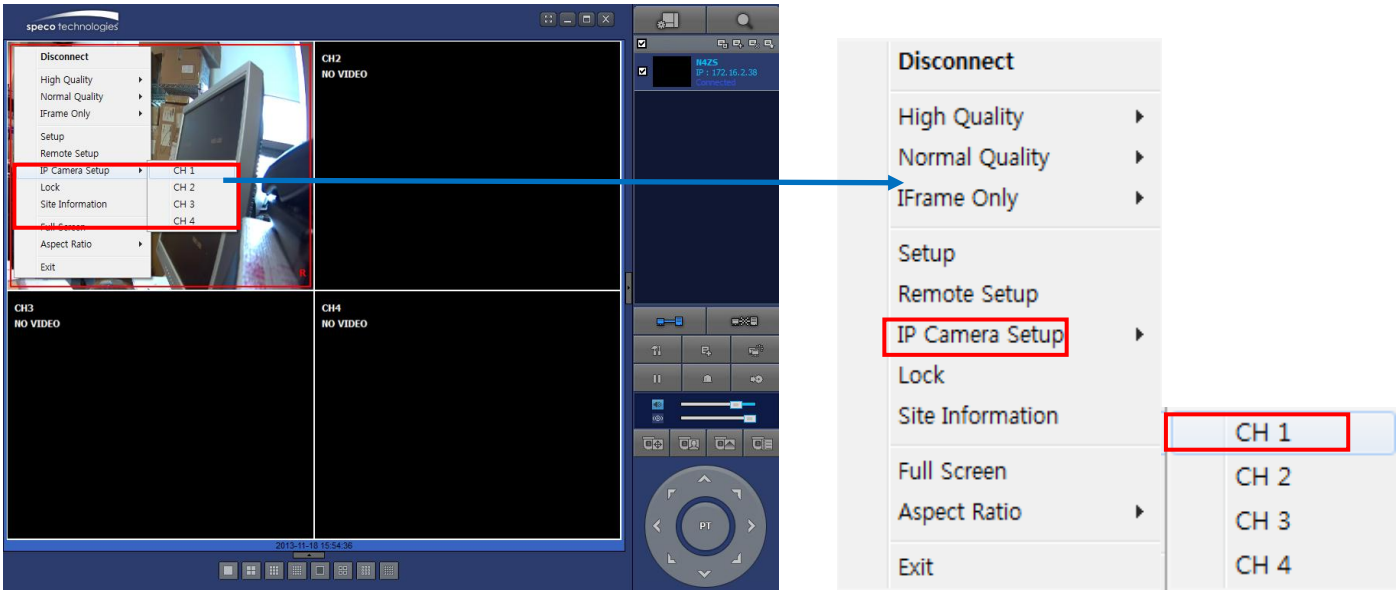


7. AVI video data is recorded as set in AVI Backup window. AVI format video can be played back by using Window Media Player™ or other media player that is compatible with AVI format video.



7-9. ZIP IP Camera Setup

The menu settings for the ZIP IP Cameras can be set over network via SpecoTech Multi client Software. Put the cursor of the mouse on the channel, which is connected to the site and right click on the mouse to open the submenu. Then the following window is displayed as below. Select the **IP CAMERA SETUP**.



Then the setup window is displayed. The specified menu screen is displayed on the upper left of the screen. Enter the password of the IP Camera when prompted.

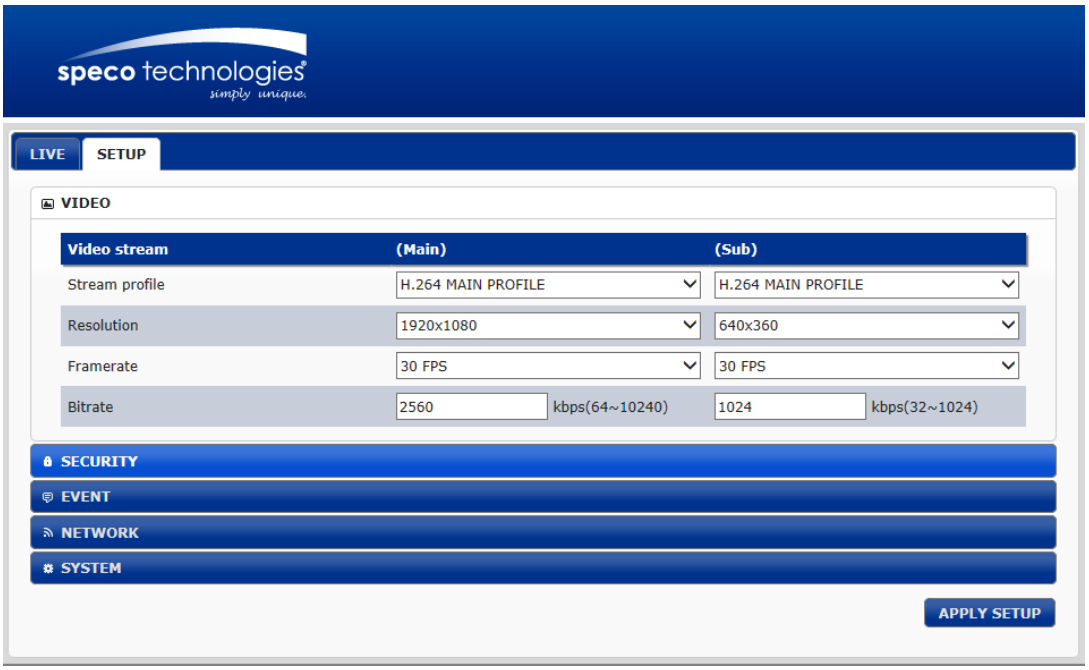
(NOTE: The default ID : "**admin**" and Password is "**1111**")

7-9-1. Live View

Live View using Internet Explorer

Open Internet Explorer and enter camera's IP address. The system will ask for confirmation to install Active-X control. Once authorized, the Internet Explorer will start to display video images from camera as shown below

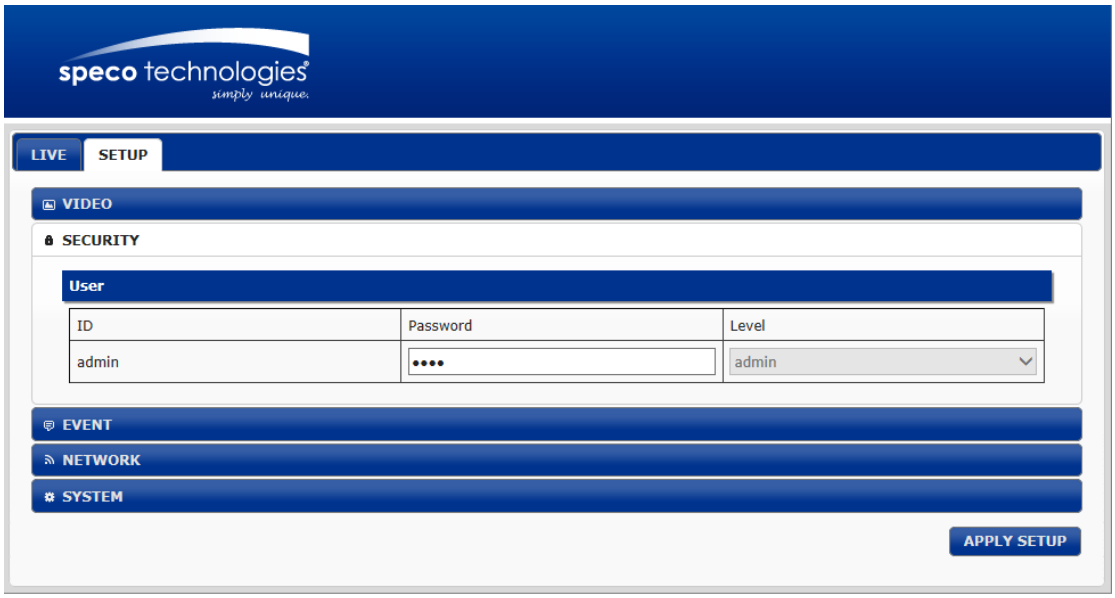
7-9-2. Video



■ **VIDEO Stream (MAIN/SUB)**

- **Stream profile :** The standard defines various sets of capabilities, which are referred to as profiles, targeting specific classes of applications.
- **Resolution :** Select video compression resolution. Compression resolutions are different depending on input formats.
- **Framerate :** Determine the maximum number of frames of video images to compress. The frame rate of actually transmitted video can be affected by the network bandwidth limitation
- **Bitrate :** Selectable video Bit rate. This selection is available if Preference is set to 'Bit rate '

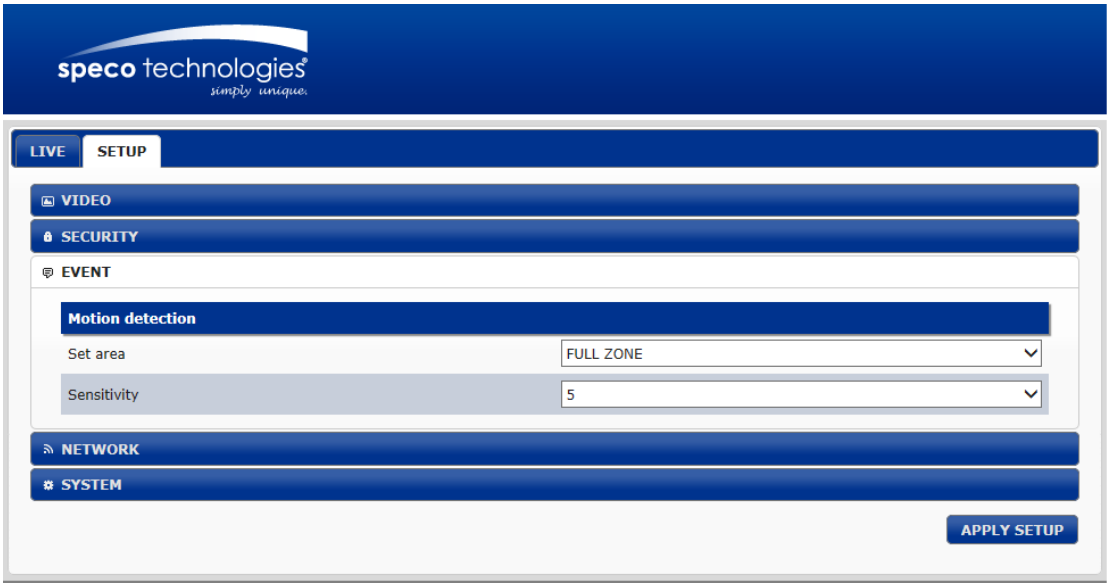
7-9-3. Security



■ **USER**

- User can be registered and privilege level of a user can be specified. User configuration is allowed only to admin user.

7-9-4. Event



■ **Motion Detection :** Select Motion Detection function

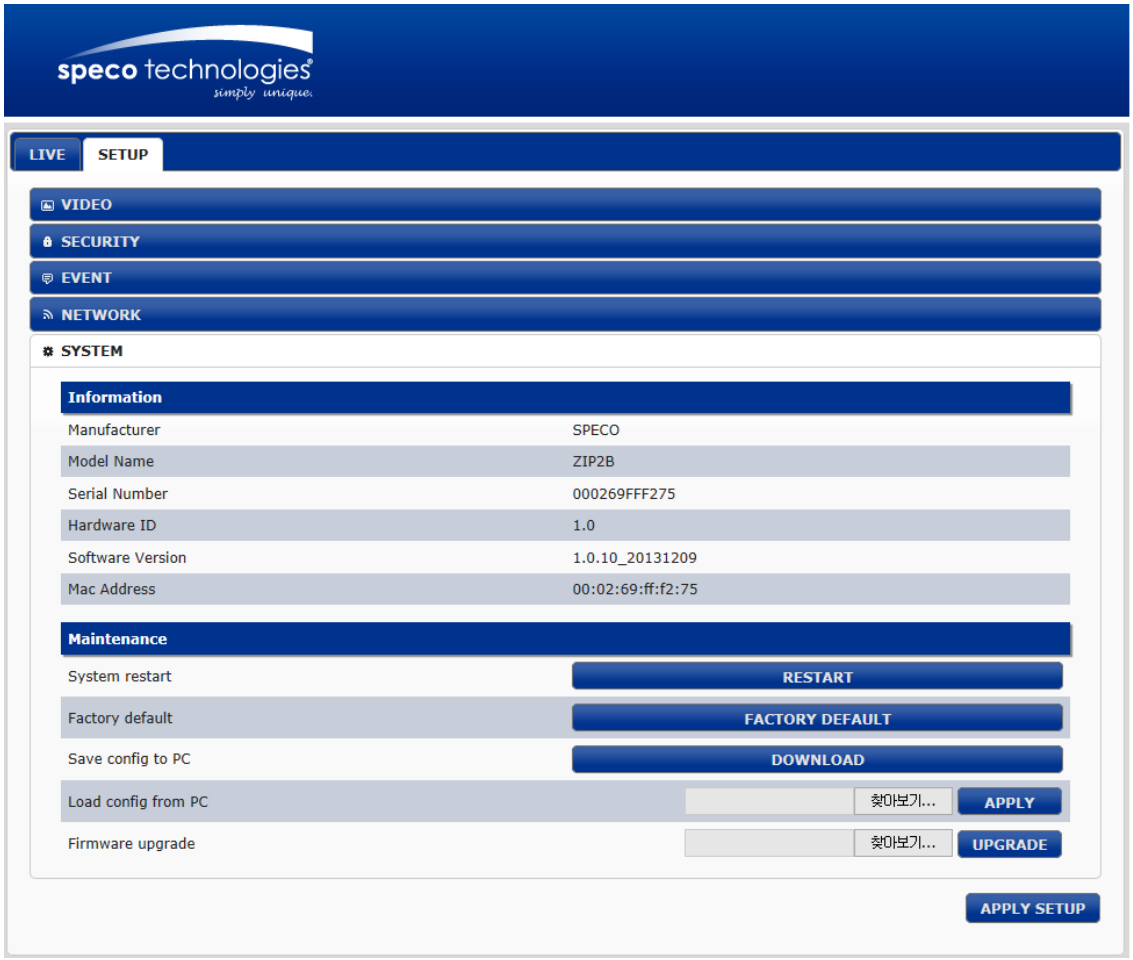
- **SET AREA :** Configure regions for motion detection
- **Sensitivity :** Set the condition to trigger an event for motion detection. The value determines the sensitivity of the motion detection within a block: the smaller, the more sensitive

7-9-5. Network

■ **Network Type :** Select the Network Type(DHCP, Static)

- **DHCP :** The address setting mode is automatic.
- **STATIC :** The address setting mode is manual. Input IP, Gateway, Subnet Mask, and DNS IP.

7-9-6. System



■ **Information**

- **Manufacturer**
- **Model Name**
- **Serial Number**
- **Hardware ID :** Display the Network Hardware ID of the camera recognized by system
- **Software Version :** Current firmware version
- **MAC Address :** Display the MAC address of the camera

■ **Maintenance**

- **System restart**

  Pressing **Reboot Server** button will cause the system to reboot. Do not press the Reboot button unless the server needs a reboot.

- **Factory Default**

  Set all settings to the factory default values. System log and user registrations are also cleared.

- **Save config to PC**

  All the setting of configuration can be stored.

- **Load config from PC**

  Stored configuration can be browsed and restored. The server is rebooted once **Config Restore** button is pressed.

- **Firmware Upgrade**

Press **Browse** button to select a firmware file from PC.

Press **Firmware Upgrade** button to start to upgrade.

Messages for showing status (downloading / upgrading) will be displayed.

The camera will reboot automatically after completing upgrade. **Do not turn the camera off during upgrading**

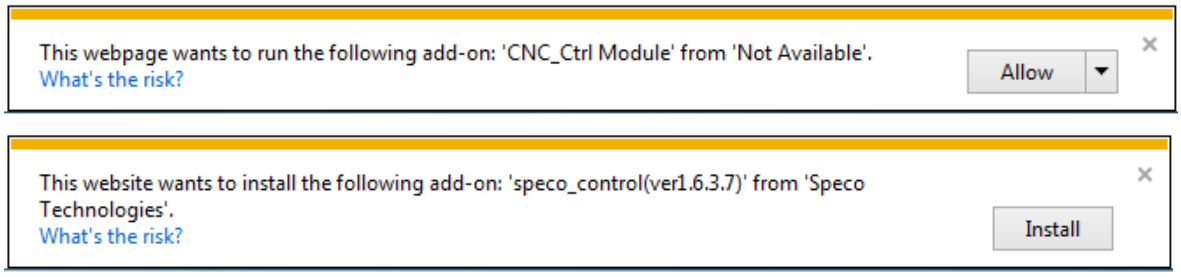
8. Network Access Using SpecoTech Web Viewer

The ZS provides a live remote monitoring feature via SpecoTech Web Viewer.

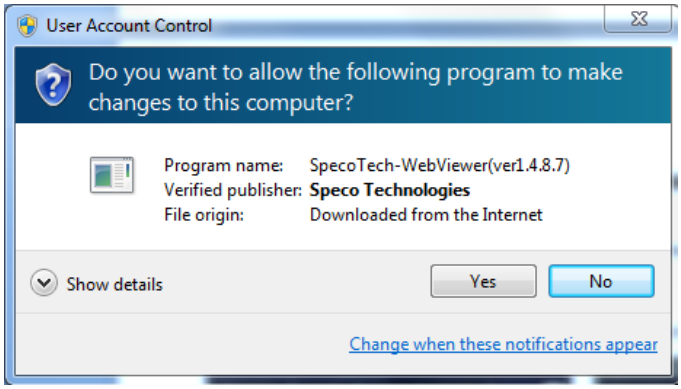
(NOTE: Web-Browser is only available for Internet Explorer)

1. Check the IP address of the ZS from SETUP>SYSTEM>DESCRIPTION>IP ADDRESS or
2. Input the IP address or Domain name address that you pre-registered.

3. Click this bar. Then the dialog box is displayed.

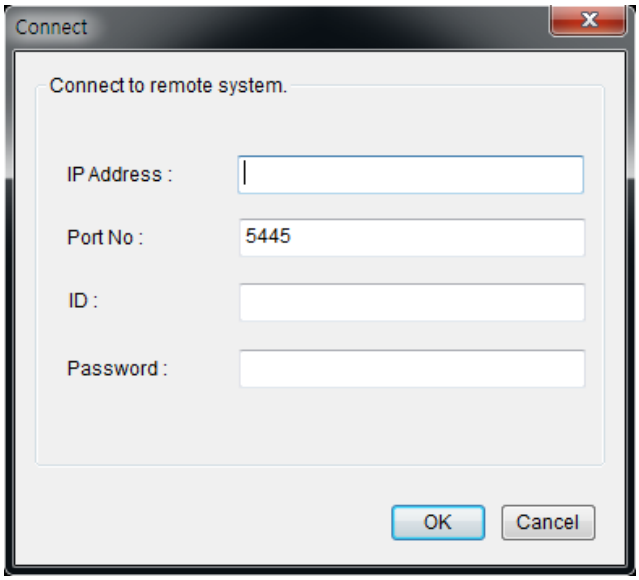

This webpage wants to run the following add-on: 'CNC_Ctrl Module' from 'Not Available'.
What's the risk?
Allow
This website wants to install the following add-on: 'speco_control(ver1.6.3.7)' from 'Speco Technologies'.
What's the risk?
Install

4. Click “Install” to download and install the ActiveX control.


User Account Control
Do you want to allow the following program to make changes to this computer?
Program name: SpecoTech-WebViewer(ver1.4.8.7)
Verified publisher: Speco Technologies
File origin: Downloaded from the Internet
Show details
Yes
No
Change when these notifications appear

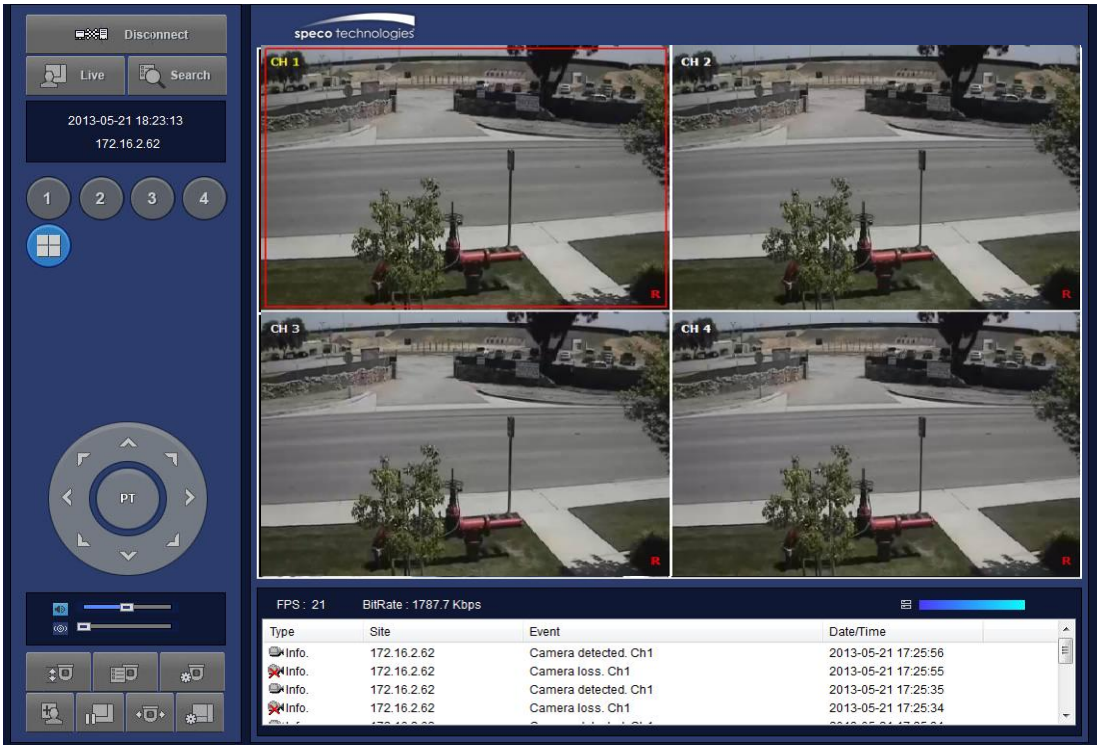
5. The Web Viewer will be displayed as below after the ActiveX installation

6. Click the CONNECT button on the Left upper corner of web-viewer. Then “Connect” dialog is displayed.



- **Site Name:** Input a name that properly describes a site.
- **IP Address:** Input IP address (Public IP address of a router that ZS is connected.) or Domain name
- **Port Number: Default Port Number is “5445”.**
- **ID:** Input ID of ZS. **Default ID is “admin”.**
- **Password:** Input network password of ZS. **Default Password is “1111”.**

7. Then the cameras connected to the ZS are displayed on the screen.
8. Use mouse scroll to digitally zoom in and out from a single channel display.



9. Network Access Using the Smart Phone Viewer

Notice

Data Usage applied without Wi-Fi connection. Please check with your Phone Carrier.

9-1. App Viewer for iPhone

1. Enter the Apple iTunes Store.

2. Search “Speco Player” in the App Store.

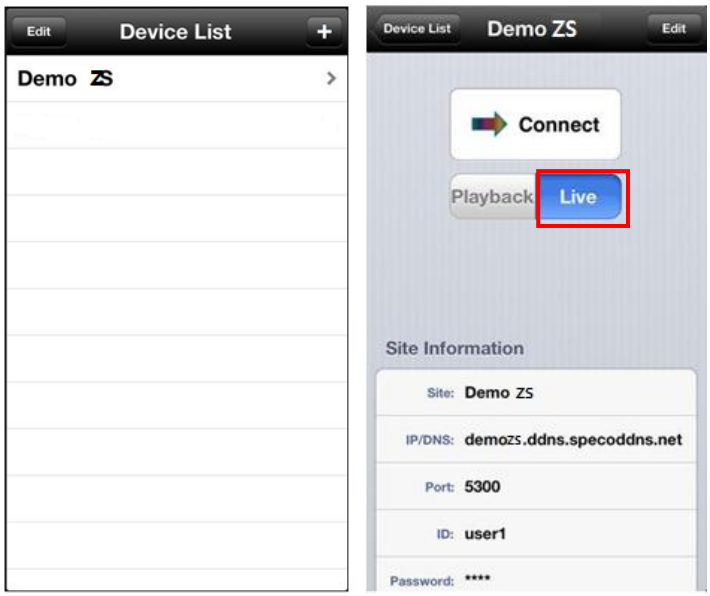
Notice

SPECO Player is for the ZS, NS, DS, RS, their Wall Mount versions and HD series. SPECO Player is not compatible with the CS/LS/PS/GS Models, the T Series (TH, TN or TL) or the PC Series.

9-1-1. Live

1. Open the installed “Speco Player” App and click button to add a remote device.

2. Enter the site name, IP or DDNS address, Network Port number (default 5445), ID(default admin) and Password (default 1111). Then, click “Save” button.



* Note: Network Port and Web Port must be forwarded before adding a new site.

3. Select a registered device and select LIVE. Then click “CONNECT” button.

4. The app will display the selected channel(s). Double tap the channel screen to switch 1 channel display to 4 or 8 channels split display depending on the ZS.

5. To select the display mode(1, 4, 9, 10 or 16 split display), tap the arrow menus button

6. Drag and drop channels

   Touch and drag one channel to the other channel to swap the channel location. To swap the channel, drag a channel to another channel.

7. Digital Zoom In-Out

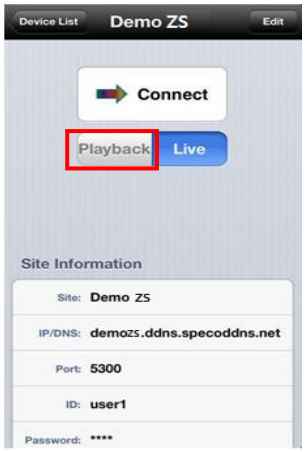
   Double tap on the desired channel to view in 1channel mode. Then use the iPhone zoom feature using two fingers to pinch the screen to zoom in or out on the video image. User can also move the zoomed image around by touching the desired spot and dragging the zoom image.

9-1-2.PTZ Control

To control the PTZ functions of the camera, tap the menu button. Then PTZ menu icons will display. Using the PTZ icon on the screen, control PTZF control.

9-1-3. Playback

1. Select Mode as 'Playback' Playback and click 'CONNECT' button. Then select Date & Time and click PLAY button.



2. The app will display the selected channel(s). Double tap the channel screen to switch 1 channel display to 4 or 8 channels split display depending on the ZS.

3. Tap the menu button. Then Playback menu icons will display.

9-2. App Viewer for Android Phone

1. Enter the Google Play Store.

2. Search “Speco Player” in the Android Market and install the “Speco Player” App.

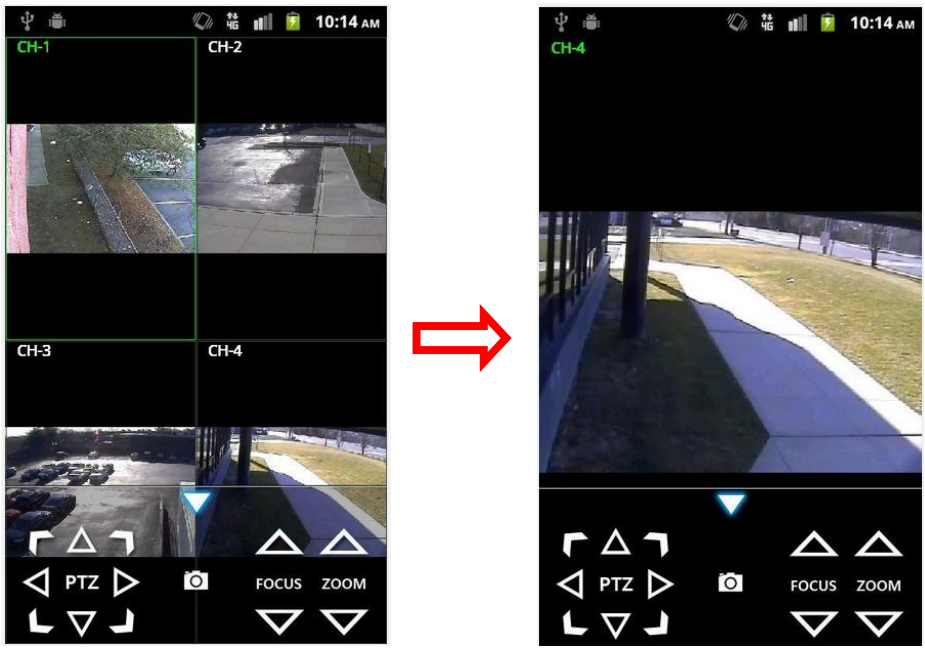
Notice

SPECO Player is for the DS, RS, WRS, NS and ZSs. SPECO VIEWER is not compatible with the T Series NS’s (TH, TN or TL) or the PC Series NS’s.

9-2-1. Live

1. Open the installed “Speco Player” App and select the Live Preview. Then click the menu button of the phone to add a remote device.
2. Select the registered device and select LIVE VIEW and select up to 4 channels to monitor. Then click START button.

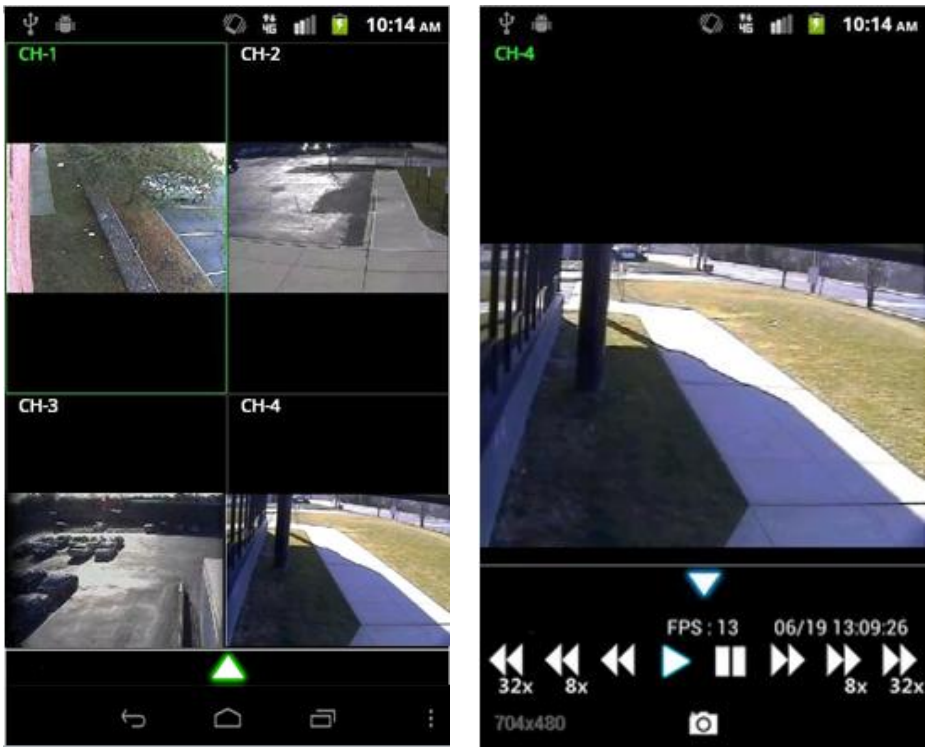
3. The app will display the selected channel(s). Double tap the channel screen to switch 1 channel display to 4 channels split display.



9-2-2. Playback

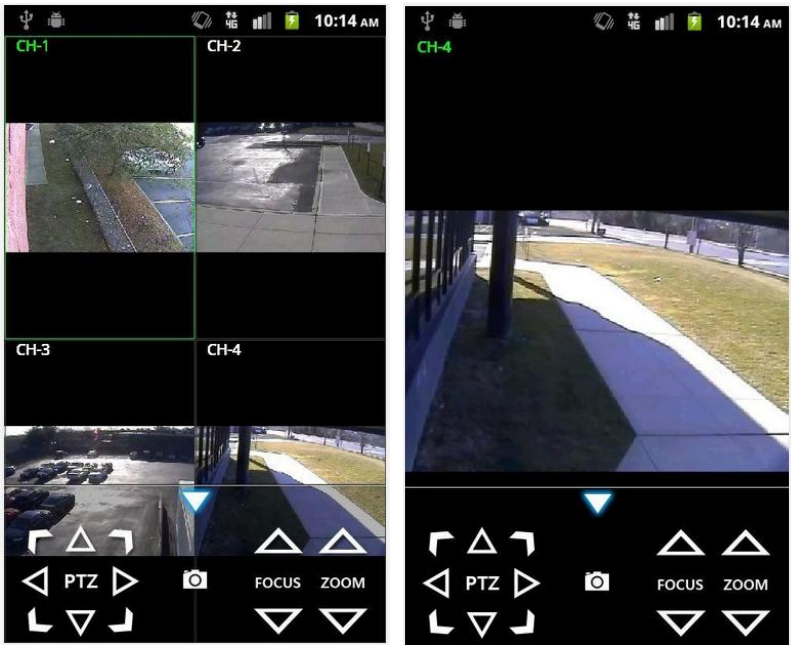
1. Select the registered device and select PLAYBACK and select up to 4 channels to search. Then click START button.

2. The app will display the selected channel(s). Double tap the channel screen to switch 1 channel display to 4 channels split display.

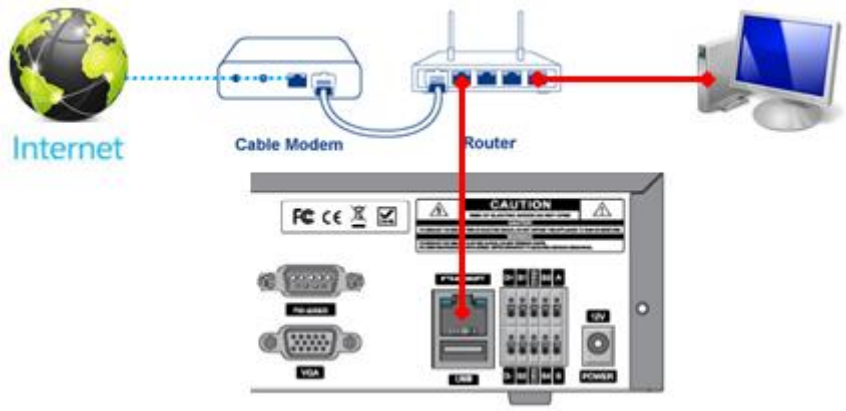


9-2-3. PTZ Control

To control the PTZ function of the camera, tap the channel screen, then the channel name will be highlighted in Yellow. Using the PTZ menu icons on the screen, control PTZF.

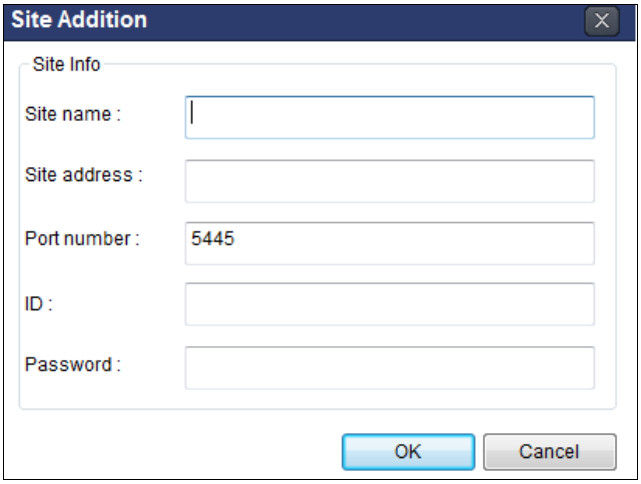


APPENDIX: Network Connection - LAN



1. Install the network client software from the supplied CD.
2. Check the IP address from SETUP > SYSTEM > DESCRIPTION or SETUP > NETWORK of ZS.

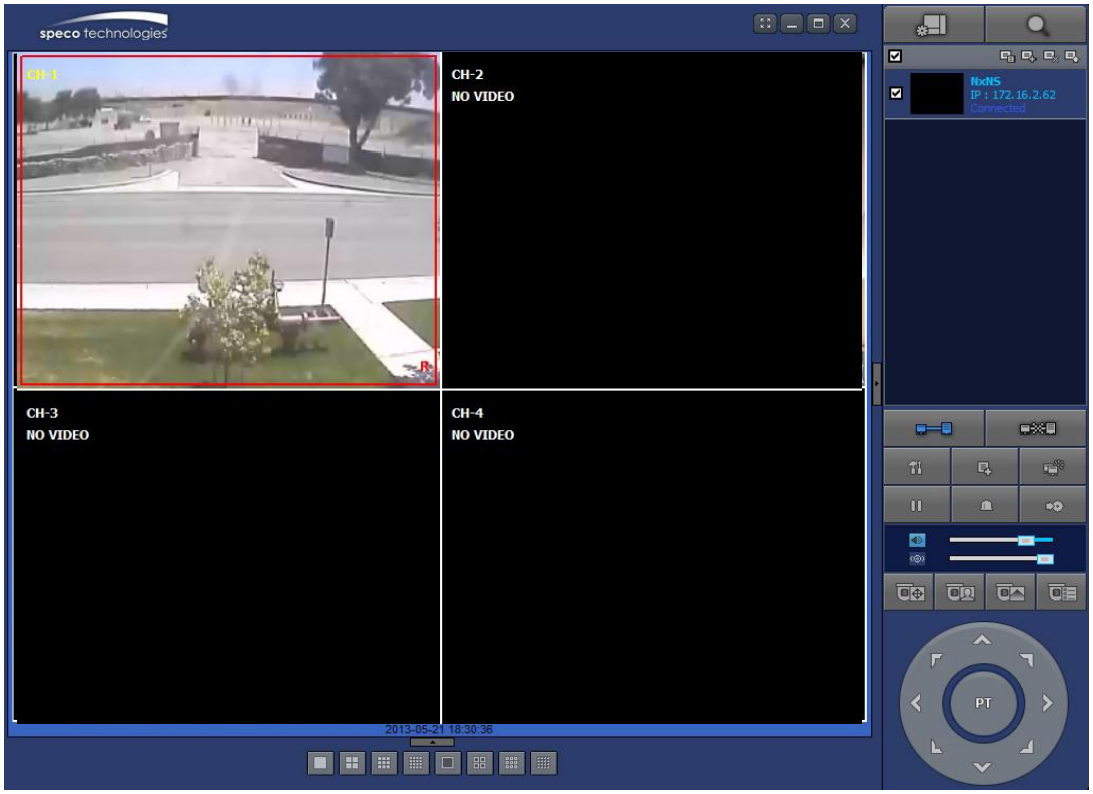
3. Run the network client software.



4. Input Site Name, Site Address (IP address), Port Number, and Password on the connect window.

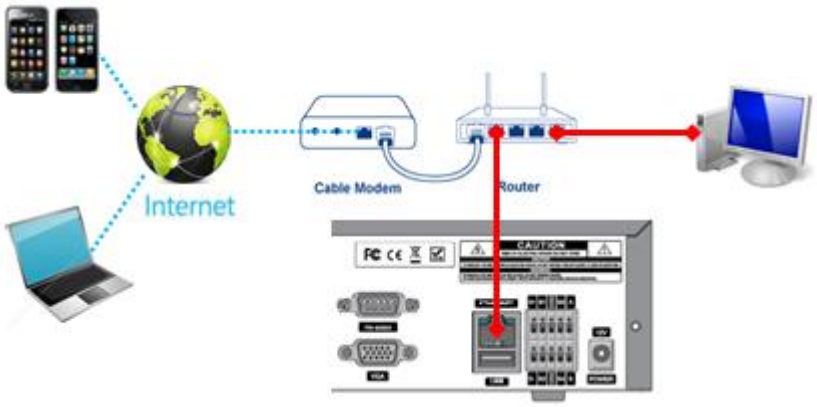
- **Site Name:** Input a name that properly describes a site.
- **IP Address:** Input IP address
- **Port Number: Default Port Number is "5445".**
- **ID:** Input ID of ZS. **Default ID is "admin".**
- **Password:** Input network password of ZS. **Default Password is "1111".**

5. Select a site by checking the box, and Press button to connect to the site.



APPENDIX: Network Connection – Internet and DDNS

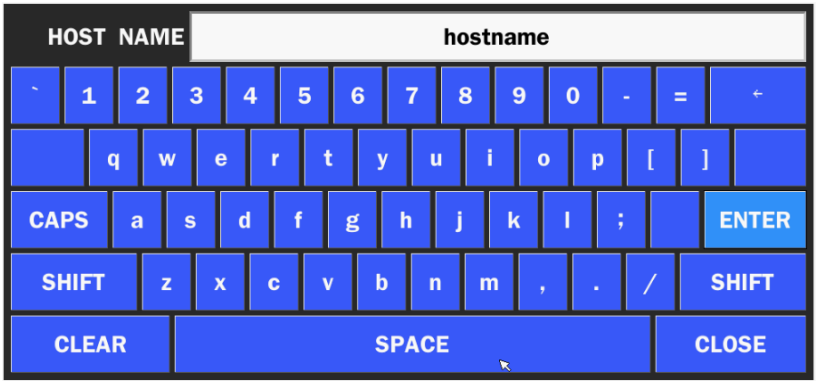
Dynamic Domain Name System (DDNS) allows a domain name to be constantly synchronized with a dynamic IP address. A current dynamic IP address is being associated with a static domain name.



1. Go to SETUP>NETWORK>DDNS and set the DDNS SERVER to ON.

> If you set **ezDDNS** to ON, the host name is automatically generated and registered.

2. Go to SETUP>NETWORK>DDNS>HOST NAME. Manually enter a domain name using the virtual keyboard and click ENTER button.

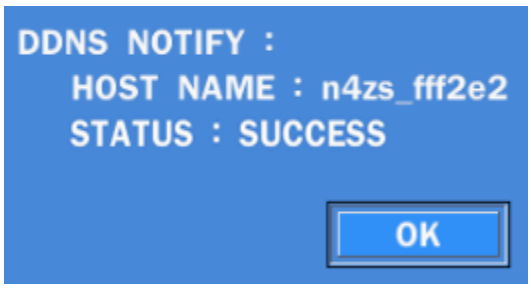


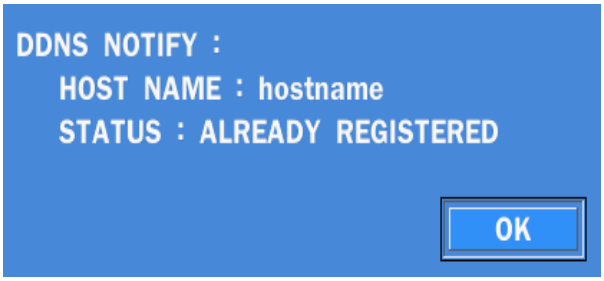
3. When a manual host name is completed, Go to SETUP>NETWORK>DDNS>SUBMIT/UPDATE and select ON to submit the settings on the SPECO DDNS.

> Once the setting is completed, the DDNS address will be:
> http://hostname.ddns.specoddns.net
> For example, if you enter the host name as “ZS”, then the address will be:
> http://ZS.ddns.specoddns.net

4. When DDNS setting is done, click the APPLY button. Otherwise DDNS setting will not be applied.

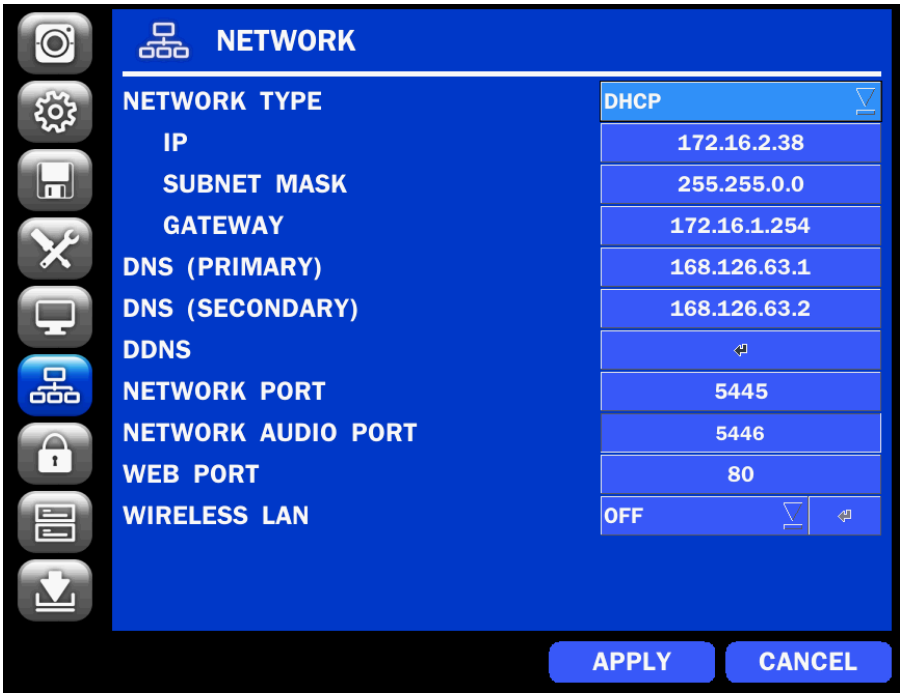
5. When you exit SETUP menu, DDNS NOTIFIY window will pop up.





6. DDNS registration status can be checked from SYSTEM INFORMATION or SETUP>SYSTEM>DESCRIPTION>DDNS STATUS

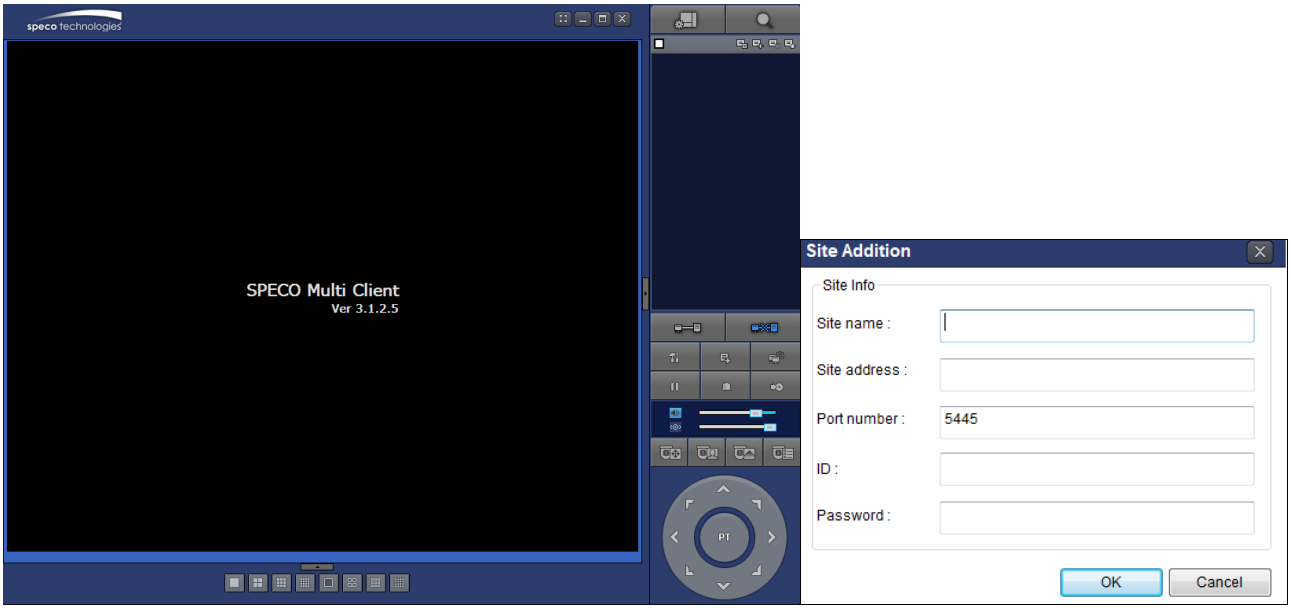
7. Check the NETWORK PORT (Default: 5445), WEB PORT (Default: 80), and the IP Address of the ZS from SETUP>NETWORK.



8. Port forward the NETWORK PORT (Default: 5445) and WEB PORT (Default: 80) of the private IP Address of the ZS on the network router.

Please refer to the user manual and guide for the detailed steps for port forwarding for specific router model.

6. Run the network client software.



7. Input Site Name, Site Address (IP address), Port No., and Password on the connect window.

- **Site Name:** Input a name that properly describes a site.
- **IP Address:** Domain name or Public IP address of a router that ZS is connected.
- **Port Number: Default Port Number is "5445".**
- **ID:** Input ID of ZS. **Default ID is "admin".**
- **Password:** Input network password of ZS. **Default Password is "1111".**

8. And select the OK button. Then, press button after checking the left check box.